Clinical Lecture
ON
THORACIC ANEURISM.

Delivered at the Liverpool Royal Infirmary.

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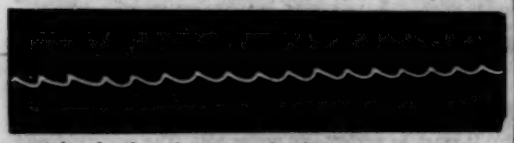
GENTLEMEN, — The subject of our lecture to-day is Thoracic Aneurism; and as there have been three cases of this disease under my care during the past few months, I wish to call your attention to them, and to make them the subject of some general remarks on the treatment of the affection.

Few diseases are more interesting to the practical physician. Thoracic aneurism is usually very insidious in its origin; its early symptoms are frequently very obscure; its progress is at one time rapid, at another time slow; its diagnosis, simple when the disease is fully developed, is extremely difficult in its early stages; and, unfortunately, its tendency is, sooner or later, to a fatal issue. But whilst, from the very nature of the disease, a cure or complete recovery cannot be anticipated, there can be no doubt that in most cases a good deal may be done to check the progress of the affection, to mitigate its distressing symptoms, and to prolong the life of the sufferer from it. Indeed, I shall be able to refer to cases in which undoubtedly consolidation of the aneurismal sac has taken place to a very considerable extent. Let me call your attention to the three cases which you have seen.

The first is that of J. S——, aged thirty-five, who was admitted on the 10th of July last. He was a sailmaker on board ship, and had suffered from dyspnœa and cough for seven or eight months. He was a spare man, and had a very anxious expression—an expression at once indicative of some serious organic lesion. We found, on examination, a distinct pulsation under the left clavicle; in fact, the whole of the upper part of the chest on that side was pushed forward at each beat of the heart. We found dulness on percussion over the upper part of the sternum, and extending on either side. Moreover, a loud systolic bruit was heard over the seat of pulsation. The pulse in the left arm was very small, scarcely perceptible, and that in the right arm was by no means full. The patient complained of pain in the shoulder; he was somewhat hoarse, but there was no dysphagia. The diagnosis in this case was attended with no difficulty; the disease had so far developed itself that no doubt could be entertained of its nature. It was not a very promising case for treatment, although the patient proved to be exceedingly tractable, and carried out, I believe, the rules laid down for him.

Now as to the treatment. This consisted in a spare diet, rest in the horizontal position, the exhibition of the iodide of potassium, and the application of ice to the tumour from time to time. The iodide was given at first in ten-grain doses three times a day; but subsequently—viz., from the 28th of July—in twenty-grain doses. On Aug. 18th a tracing (which I show you) of the pulse in the right wrist



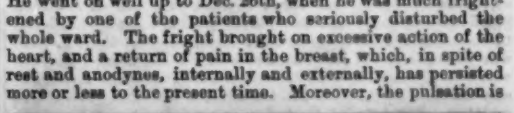
was taken by the sphygmograph; but no tracing could be obtained on the left side, for the pulse was almost obliterated. At that date the pulsation in the tumour was somewhat diminished, and the man complained less of pain. His health was good, and his appetite fair. We noticed, however, that he had a loud, barking cough, to which I called your attention as being probably due to pressure on the trachea or one of the bronchi. He also had more dysphagia, a further indication of pressure. By the end of September it was evident that consolidation was taking place in the sac; the pulsation was less distinct but somewhat more diffused. At this time there was neither dyspnœa nor dysphagia. On Oct. 18th there was slight hæmoptysis—always an unpleasant symptom in thoracic aneurism, as it may indicate some ulceration of the tumour into the air-passages. The hæmorrhage, however, soon ceased, and the patient progressed fairly well, so much so, indeed, that on the 25th of November I allowed him to get up a little daily. The improvement, however, did not continue, and I enjoined rest again. About the middle of December he had a severe attack of dyspnœa, with a sensation of choking, whilst he was taking a meal, and on examination we found dulness and a systolic bruit between the right scapula and the spine.

The dyspnœa and dysphagia increased from this date; in fact, it became evident that the aneurismal tumour was pressing on the air-passages and the œsophagus, and there appeared to be no prospect of affording the patient any relief. On Dec. 23rd I found him suffering greatly, and he expressed a wish to be removed to his home. I warned him and his friends of the danger of removal, but they took him away during the afternoon, and we heard that he died the same evening.

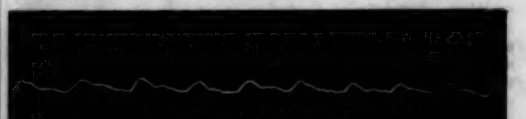
Now let me call your attention to the case of R. H——, in No. 10 ward. This man, a tinsmith by trade, thirty-four years of age, was admitted on the 5th of September last. He had, he said, been quite well until about four months before admission, when he had pain under the right clavicle, which subsequently extended down the arm. He first noticed a beating on the right side some three or four weeks before he came here.

We found, on examination, a pulsating tumour on the right side of the chest, with fulness under the clavicle. The pulsation was most distinct in the second intercostal space. There was a soft systolic bruit over the tumour. There was no dyspnœa, unless the patient lay on the right side; no cough, no dysphagia, and no hoarseness. The respiration was not so good on the right side as on the left, indicating some pressure on the right lung; the pulse was equal in both arms.

Here, again, there was no difficulty as to the diagnosis. The man was ordered a spare diet, twenty grains of iodide of potassium thrice daily, and rest in the recumbent posture. On the 4th of October he complained much of the beating in the tumour, and I stopped the iodide and applied ice to the chest. From this he obtained relief, and on the 13th the iodide was resumed. He still, however, complained of a pain in the side and shoulder, and we used subcutaneous injections of morphia, and on one occasion five ounces of blood were taken by venesection. On Dec. 9th I allowed the patient to get up a little daily. At that time the tumour was harder, there was less pulsation, and no increase in the extent of dulness; thus we had evidence of consolidation. He went on well up to Dec. 26th, when he was much frightened by one of the patients who seriously disturbed the whole ward. The fright brought on excessive action of the heart, and a return of pain in the breast, which, in spite of rest and anodynes, internally and externally, has persisted more or less to the present time. Moreover, the pulsation is



Right pulse.

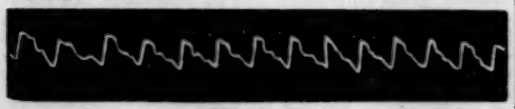


Left pulse.

more distinct than it was. There can, I think, be little doubt that the increased cardiac action removed or disturbed a portion of the deposit which had taken place, and thus has materially retarded the progress towards recovery. Un-

fortunate as such an occurrence is, it nevertheless affords a most valuable lesson. The man is now improving again. He has derived benefit to his breast pain, first, from the exhibition of solution of arsenic in seven-minim doses—a treatment which I found useful in another case of a similar kind which I shall allude to presently; and, secondly, from subcutaneous injections of morphia. I show you the tracings of his pulse. (See previous page.)

The third case, which some of you have had an opportunity of seeing, is that of G. S——, admitted on the 1st of August; but as the man left us at the end of three weeks, and I cannot therefore say much of the results of our treatment, I will only remark that there was distinct evidence of a large pulsating tumour, and of pressure on the left bronchus and left innominate vein. The patient derived some benefit to his more urgent symptoms, and he left at his own request. I show you the tracings of his pulse taken on August 18th.



Right pulse.

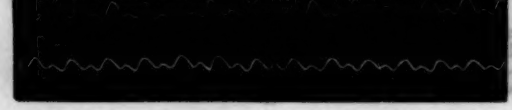
Left pulse.

The next case I shall refer to is one where decided improvement followed the use of the remedial measures which were adopted.

P. T——, thirty-seven years of age, a warehouse porter, accustomed to lift heavy weights, was admitted into the Northern Hospital under my care on the 9th July, 1870. He had suffered from pain in the left shoulder for twelve weeks, followed by a sensation of pins and needles in the left breast. He left off work about eight weeks before his admission, and a week later had an attack of dyspnœa; and then he noticed for the first time a pulsating tumour on the left side.

When admitted, he complained of pain in the left shoulder, shooting up the neck and sometimes down the arm, and of dyspnœa on exertion; otherwise he felt well. There was a round pulsating tumour to the left of the sternum in the second intercostal space. It was soft at its most prominent part, and felt as if near the surface. There was no bruit over it. The pulse was equal in both arms.

On the 11th July the patient was ordered fifteen grains of iodide of potassium three times a day, and on the 14th the dose was increased to twenty grains. Ice was ordered to be applied from time to time throughout each day. He was put on a spare diet; and rest in the horizontal posture was strictly enjoined. He continued this treatment without any change up to the 1st October, when the iodide was omitted. My note of that day is as follows:—"No pain; less beating; no prominence of tumour. There is a soft systolic bruit." The iodide was resumed on November 1st, and on the 17th he was allowed to get up a little daily. At this date consolidation had evidently taken place in the sac, and I judged it advisable, for the sake of the general health, to allow the patient to leave his bed; but on the 17th December I ordered perfect rest again, and on the 20th I stopped the iodide, which he did not take again during his stay in the hospital. His general health was good; he had not lost flesh; and there were no symptoms of any injurious effect having been produced by the prolonged course of the medicine. I show you tracings of the pulse taken on November 9th. About the middle of January the man complained of severe lancinating pain in the chest, for which I ordered seven minims of solution of arsenic three times a day. He experienced marked relief from this, and I stopped it at the end of a week. No further treatment was adopted, except that he was kept on a spare diet, and enjoined to keep moderately quiet. He was discharged from the hospital on the 23rd March, after more than eight months' stay, and was sent for three weeks to the Convalescent Institution at Southport. The following is the note made at this date:—"He is in good condition, and feels no pain. There is some pulsation, but it is distant and weak. There is no increase of dulness, no dyspnœa, no dysphagia. He says he feels the beating very little."



The only other case to which I shall specially call your attention is one which has been already published, and you can refer to it in my work on Diseases of the Chest. In brief it is as follows:—

J. L——, forty-five years of age, was admitted into the Northern Hospital on Dec. 14th, 1864, with an aneurismal tumour on the left side of the chest. There was no doubt as to the nature of the case. I submitted the patient to different modes of treatment. At first he was put on a moderate diet, with iodide of potassium in doses gradually increased to twenty grains three times a day. No perceptible effect was produced on the aneurism, although the treatment was continued for some time. After an interval of some weeks, in which nothing was done, the application of ice was tried. The man was kept in bed, and a bag of ice was applied over the tumour during the day. This was continued for many days, but no noticeable change in the aneurism followed. Acetate of lead was then administered, but with no good result. On the 18th April, after having been in the hospital more than four months, absolute rest and a very restricted diet were ordered. For eleven weeks the man scarcely moved from the recumbent posture, and the result was that at the end of that time there was a remarkable change in the aneurismal tumour: we had, in fact, distinct evidence of consolidation. The patient was allowed to get up in the twelfth week of treatment, but he was kept in the hospital nearly two months longer, that we might watch him. He then left us, and resumed his work as a ship-watcher. Three months later I saw him. He said he was quite well, and felt very little of the aneurism. It was smaller, harder, and less prominent than when he was discharged.

Thus far the case had progressed satisfactorily, and I think it highly probable that if the man had been in a position of life which would have enabled him to take sufficient care of himself he might have lived for years. He died, however, suddenly, from rupture of the aneurism into the right pleura, on the 5th March following his discharge, having, I believe, continued his work up to the day of his death.

I obtained a post-mortem examination. There was an aneurism connected with the arch of the aorta. The anterior part was filled with hard, firm laminæ of fibrine, more than an inch in thickness. The posterior wall was thin, and had ruptured. A large quantity of blood was found in the right pleura.

The case is highly instructive, for it proves the possibility of producing deposit of a firm and stable character in these thoracic aneurisms. I might refer you to other cases which have been under my care, but I think it is unnecessary, and I will conclude with a few general remarks on treatment and diagnosis.

The great object to be kept in view in treatment is the consolidation of the aneurismal sac, and to effect this absolute rest is, in my opinion, the most important means we can employ. You know the effect of the recumbent posture in diminishing the frequency of the pulse and retarding the circulation, and thus giving increased facilities for the deposit of fibrine. I think, therefore, that rest affords the best chance of producing a cure—as far as cure is possible,—but it must be perfect and prolonged. The patient should not be allowed to rise from the recumbent posture for many weeks, and the bed on which he lies must be prepared with this view. No doubt this is very irksome, and it is difficult to get patients to submit to such treatment. A restricted diet—including a small quantity of meat daily—should be also insisted on, and very little fluid should be allowed. Thirst, if present, may be relieved by occasionally sucking lumps of ice.

With regard to the use of medicinal substances, given

with the view of producing fibrinous deposits. Iodide of potassium has, of late years, been somewhat in favour with the profession. I have now used it in several cases; and although I cannot speak very confidently of its value, it has yet appeared to me to be of service. It should be given in large doses—twenty grains three times a day; and I have never seen it produce any injurious effects, although I have continued it for months. I think it is a remedy which you ought to exhibit, considering the favourable results which have, in many cases, followed its use. It may exercise a beneficial influence on the diseased bloodvessels. Acetate of lead has been recommended. I have tried it; but I cannot speak in its favour. I have seen good results from the application of ice to aneurismal tumours.

There are certain laryngeal and asthmatic symptoms which are apt to come on in connexion with aneurisms within the chest, about which I must say a few words. From pressure of a tumour on the pneumogastric or its recurrent branch, or on the air-passages, a reflex spasm is often produced. This may be either laryngeal or bronchial, and is sometimes so severe as to threaten suffocation. I have seen more than one case in which laryngeal spasm of this kind has been supposed to indicate disease of the larynx, attention being thus called away from the actual malady. I have seen a most violent attack resembling in every respect an asthmatic seizure produced by an aneurism pressing on the trachea. If therefore you are called to cases of this nature, examine the chest carefully; and should you fail to discover any signs of thoracic tumour, aneurismal or otherwise, do not pronounce an opinion before you have made an examination with the laryngescope. If disease of the larynx is present, you will detect it; if not, you will be strengthened in the view that there is some internal tumour. These acute attacks of dyspnœa usually pass off; but they may often be cut short by the inhalation of chloroform. The laryngeal spasm is apt to assume in some cases the form of chronic laryngitis, and against a mistake in diagnosis you must be on your guard.

In connexion with these attacks of dyspnœa the question of performing tracheotomy may arise. It is well that you should have clear notions as to what tracheotomy can effect in such cases. If the dyspnœa were due to spasm of the glottis dependent on pressure of the pneumogastric or its branches, undoubtedly tracheotomy would give relief; but such spasm generally yields to other measures, or passes off without treatment. When, however, the dyspnœa results from pressure of the tumour on the trachea itself or a bronchus, it is obvious that the operation can do no good, except in so far as there may be laryngeal spasm. Opening the trachea might under these circumstances give some relief and prolong life for a short time; but the operation should only be performed after careful consideration, and after the nature of the hoped-for relief has been fully explained to the patient or his friends. In the case of the man J. S——, the dyspnœa was so evidently of the latter kind which I have referred to, that no thought of the operation was even entertained.

There are many interesting features connected with this disease which from want of time I must pass over. One I will refer to. You will occasionally meet with a difference in the size of the pupils—one will be more contracted than the other. This contraction indicates pressure or irritation of some kind of the sympathetic nerve, and may occur in any case of thoracic tumour. I have observed it as a permanent symptom, more especially in aneurisms at the base of the neck. In some cases I have seen the pupil on the aneurismal side only occasionally contracted. In the cases which I have brought under your notice to-day the symptom was absent.

M. LEHMANN, the chief medical officer of the Swiss Federal Army, has just published a report on the health of the army during the occupation of the frontier last year. In the first levy of troops there were 9577 sick, or 25·6 per cent.; in the second there were 4224 sick, or 21·6 per cent., the average duration of each illness being eighteen days. Diarrhœa and chest affections were very prevalent. M. Lehmann strongly recommends the use of a flannel band round the waist, and stated that the difference between the regiments who wore it and those who did not was very marked, the former being able to stand much greater exertion.

Clinical Lectures
ON
INFANTILE PARALYSIS AND ITS RESULTING DEFORMITIES.

BY RICHARD BARWELL, F.R.C.S.,
SURGEON TO CHARING-CROSS HOSPITAL.

LECTURE I.

GENTLEMEN,—Before showing to you one or two cases and reading to you certain short extracts from my note-book, it seems desirable that I should define the class of malady which I intend to bring before you. Infantile, like adult life, is liable to certain diseases of the brain and spinal cord which result in loss of power in one or more limbs. But, besides these, the infant is subject to a form of paralysis unattended by any symptom of illness—certainly of severe illness; and this, the class of case I propose for your study, being peculiar to the infant, alone deserves the name of "infantile paralysis." Other paralytic maladies, whether occurring in senility, in the prime, or in infancy, should be classed in the categories of meningitic, myelitic, lead-poisoning, traumatic, or other form of disease. But to enable us to separate one thing from a heap of others, we must have means of recognising that single object whenever we may see it. Hence there devolves on me the ungrateful task of making a definition out of mere negatives; for the typical, and, in my experience, the common, form of the disease is, that the child should be put to bed perfectly well at night, and next morning be taken up with loss of power over a limb or part of a limb, yet otherwise quite well or only very slightly ailing.

For example: This child, Eva H——, aged thirteen (March, 1871), looks extremely healthy, except that she is lame from paralysis of the left leg. Her mother, an intelligent, clear-headed woman, says: "When she was about eighteen months old I took her out of bed one morning and put her on the floor to walk. She tumbled down. I thought she was stupid, and put her on her feet again. She fell at once, and I then found her leg was paralysed. She was not at all ill or fretful, either the night before or that morning; but I think that side of her body was perhaps a little tender."

Agnes P——, whom you have often seen, was, when she first came, nine months old, a plump and as healthy a baby as ever I saw, except loss of power in the deltoid of the right arm. The mother says: "Two months ago I took the baby out of bed, and it did not move the arm. I showed it to the doctor, and he said the child must have been hurt. I do believe the girl I had then lifted it up by the arm; but the baby did not cry either the night before or that morning more than usual. She always cried when she was being undressed and washed. I observed no difference in that, and she seemed quite well."

One more history from my note-book:—

Louisa R——, brought to me in April, 1870, when seven years and a half old, with foot deformity resulting from paralysis. Her mother, an active-minded and very acute woman, says that one very hot day, when the child was about eight months old, she was put asleep under a tree on the lawn, and on a damp cushion. The next day she was taken up with the right leg paralysed. The child had not then any sign of illness whatever, and always has been, with that exception, a strong, healthy girl.

Of such cases and histories I could give you an almost unlimited number. Some attacks may have been preceded for an hour or two, perhaps even for a day or two, by some slight disturbance, fretfulness, a hot skin or mouth, even a slight convulsion. On the morning of the discovery there may be some evidence of pain in the affected limb, some feverish disturbance, and the disease itself may affect a larger or smaller portion of the body. But the more the history and concomitants depart from the type which I have given above, the more any disturbance approaches absolute illness—especially if convulsions have been frequent

and severe,—the more the stricken regions resemble the relationship of hemiplegic or paraplegic parts, the more likely is the case to be an example of myelitis or meningitis, and the less likely to belong to the pure infantile paralysis, which, as you have seen, does not exhibit a single symptom of central nervous disease.

I feel bound to insist strongly on this distinction, because medical opinion has of late years more and more agglomerated round the idea, fallacious in origin and in result disastrous, that all these cases are dependent on cerebral or spinal disease. Heine, Fliess, Laborde, Radcliffe, and many others, have upheld this notion; and I must shortly point out what essential differences separate this disease from spinal affections. But first as to pathological appearances. Only seven cases of anatomical investigations have been published. In four of these nothing was detected; in one—that of Dr. Fliess (*Journal für Kinderkrankheiten*)—was found a congestion which, emanating from the gums of the teething child, was continued on to the membranes of the cord. It need hardly be pointed out that the preconceived ideas which aided this description are more easily comprehensible than the anatomy of the congestion. To the two other post-mortem examinations I must unfortunately also take exception, for the two cases which form the groundwork of Dr. Laborde's treatise, "La Paralysie (dite Essentielle) de l'Enfance," are cases respectively of myelitis and meningo-myelitis, with their characteristic histories and symptoms, and do not belong to the disease under consideration. The absence of illness and of danger to life renders it improbable that morbid anatomy will ever furnish a clue to the causality of this disease; we must, at all events for the present, be content with studies from life.

The children we have now to do with are not ill, have no severe convulsion, insensibility, nor pain; therefore no disease marked by severe symptoms, such as myelitis or meningitis, can be present. But a congestion of the cord does not give rise to any attack of such suddenness and severity; it may also be supposed to vanish at death after having produced paralysis in life. There is, too, a certain similitude between congestive and infantile paralysis—such as immunity of the respiratory muscles, bladder, and rectum. Nevertheless, when the condition of a patient with congestion of the spinal cord is compared with a case of infantile paralysis, the observer will not fail to mark a vast difference between the plump limber limbs of the one, and the cold, shrivelled, flaccid muscles of the other. A further investigation into the condition, more especially by various modes of electricity, will render prominent other and more radical differences. A rapid view may best be given by arranging these into opposite columns.

SPINAL CONGESTION.*	INFANTILE PARALYSIS.
Paralysis incomplete—always at first, and generally throughout the case; it tends, however, to deepen.	Nothing can be more utter and entire than the loss of power at the very commencement; it tends, however, to lighten.
Generally paraplegic in form at the end, if not at the beginning. Usually one leg is attacked first, then the other. The malady becomes more extensive as it goes on.	Paraplegic form is not usual at the commencement, still less afterwards. When the disease has attacked one part, it never subsequently affects another. It is most extensive at its commencement.
Tingling in fingers and toes.	I have never been able to detect the slightest sign of pain or discomfort. In a few cases there is a little and a doubtful increase of sensibility to touch.
Shortness of breath not infrequent.	No alteration ever observed in breathing.
Fluctuations towards better and worse occur in all cases; sometimes these are rather frequent.	No change, backward or forward, ever occurs; if the patient gain a step, he does not lose it again. (Effects produced by treatment are not referred to.)
There is a decided tendency to relapse, even after the patient appears to have got well.	No tendency to relapse. I have never seen or heard of a limb being paralysed a second time, nor of another limb being the subject of a second attack.
Reflex irritability is, according to some authorities, increased — according to others, decreased.	Reflex irritability is so utterly annihilated as to leave no room for variety of opinion.
No wasting of paralysed muscles.	Extremely rapid wasting of paralysed muscles, setting in very quickly after the attack.
No marked impairment in affected muscle of electro-contractility.	Remarkable impairment of electro-contractility — indeed, total loss of response to the induced current.

* The symptoms of spinal paralysis are taken from Reynolds's System of Medicine, vol. ii., p. 663 *et seq.*

These differences are very marked, and so important that the first six alone appear to separate nosologically the one disease from the other; but it is to the last three that I would especially direct attention. They are physiologically connected in infantile paralysis. The induced current ceases entirely to call forth any contractions of the paralysed muscles in from twelve to seventy-two hours. At the same time there is developed an abnormal sensibility to the voltaic current. Now this peculiar behaviour never occurs in any case of central paralysis, but is exactly what happens when a nerve supplying a muscle has been divided; moreover, both muscles—i.e., the one whose nerve has been cut and the one paralysed by this malady—lose all excito-motor contractility. But when a nerve of a warm-blooded animal is cut, the muscle, at first flaccid, becomes very hard and strongly contracted as long as the wound remains unhealed. When this is well the muscle relaxes. The nearer the spine be the wound the harder and more contracted will be the muscle, and the less rapid is the loss of sensibility to the induced current. If we divide the nerve close to its entrance into the belly of the muscle we find hardly any rigidity, quick loss of galvano-contractility, and rapid wasting. Therefore if we could go a little further and destroy the nerve absolutely at its distribution among the muscular fibres we should, in all probability, carry the above three characteristics of infantile paralysis—namely, flaccidity, irresponse to faradaism, and wasting—as far as they are developed by the disease itself.

It appears impossible to escape the conclusion that infantile paralysis is a malady purely peripheral, affecting the ultimate nervous fibrillæ of distribution in the muscular elements. I am anxious, gentlemen, that this conclusion be not pushed too far. I am not supposing or imagining any degenerative or structural change in the nerve-fibres as the cause of this malady. The attack is too rapid and too quickly succeeds exposures to warrant such an idea. The essence of the disease probably lies in some subtle derangement of relationship between ultimate nerve and ultimate muscle-fibre; perhaps from some inflammatory, but more probably from a chemical or nutrient change. In after years any amount of tissue degeneration may occur.

Allow me now to refer to a former remark, and to explain its intention. A few paragraphs ago I said that the prevalent notion concerning the central origin of this malady was in its results disastrous, and in saying this I refer especially to the effects produced by loss of time. In the first few hours of the attack the affected muscles are still sensitive to the faradaic or interrupted current. This sensibility rapidly declines, and I am not aware that any use of this force would prevent its extinction. After a time, which varies in different cases, there is established a sensibility to the voltaic or battery current, and it is upon this that we must rely as our chief aid in the treatment of the disease; and a judicious practice, by keeping alive this contractility, preserves the muscle from extreme wasting and degeneration. To wait, with temporising treatment or with none at all, until this sensibility is in its turn extinct, is the disastrous result of the belief I have combated. Delay in applying the treatment pays a heavy percentage in subsequent difficulty and duration. Very few cases get well of themselves, and tissue change, as evidenced by the wasting, begins almost immediately. If, then, a child

within twenty-four hours of its first attack do not already show marked signs of recovery, not merely in one or two, but in every muscle, the state of the case should be carefully and rigorously tested by faradisation, and again in another twenty-four or forty-eight hours. Any muscle which, at the end of thirty-six or seventy hours, has ceased to respond, or responds more feebly than at the last examination, will not of itself get well, and to delay treatment is in all probability to condemn the patient to a crippled existence. No disease is so obstinate when old; but while still new, few are more amenable to treatment.

CASE OF EMPYEMA TAPPED TWICE; GREAT IMPROVEMENT FROM DRAINAGE-TUBE.

BY C. THEODORE WILLIAMS, M.D., F.R.C.P.,
PHYSICIAN TO THE HOSPITAL FOR CONSUMPTION, BROMPTON.

WILLIAM P——, aged twenty-eight, a letter-carrier, was admitted under my care July 4th, 1871. He had always enjoyed good health till four months and a half ago, when he caught a severe cold, followed by rigors, sharp pain in the right side, dyspnœa, and cough. He has lately been losing flesh, and for two days has had diarrhœa. The pain, dyspnœa, and cough have continued up to the present time; the cough is exceedingly troublesome, and the expectoration copious, muco-purulent, and rather offensive; there is orthopnœa; aspect pale; skin perspiring; bowels relaxed; appetite fair.

Physical signs.—Dulness, deficiency of motion and respiration, absence of vocal fremitus over the whole right side, the intercostal spaces being bulged, and the right shoulder considerably raised. Some tubular breathing and bronchophony is audible in the first intercostal space and above the scapula. On the left side the dulness extends slightly beyond the sternum into the second and third intercostal spaces, showing the right pleura and its contents to be encroaching on the left side of the chest. The heart is pushed to the left and slightly upwards, its apex being felt beating between the fifth and sixth ribs, 2 in. to the left of nipple; harsh breathing over the whole side. The diagnosis was empyema of the right side. Patient was put on the full hospital diet, and in addition ordered bacon for breakfast, beef-tea for supper, and four ounces of sherry.

July 8th.—Appears worse, having hardly slept, and suffering great pain in the right mammary region, where there is œdema and redness; the dyspnœa has increased, and diarrhœa continues; tongue furred; pulse 130; respiration 36; temperature 103·2°. The right side measures through the mammary line 1½ in. more than the left.

10th.—The diarrhœa has ceased; the cough is worse and the patient expectorated a pint and a half of muco-purulent matter in twenty-four hours; pulse 140; respiration 40; temperature 103·2°. The symptoms of oppression of breathing being great, Sir Wm. Fergusson was called in, and at my request passed a trocar and canula between the fifth and sixth ribs, about 4 in. to the right of the nipple, and drew off four pints of purulent fluid, which issued freely at first, but when the stream began to abate Sir Wm. Fergusson used a glass exhausting syringe, and in this way drew off all the remaining fluid, and any air which had happened to enter. After the operation the patient seemed much relieved, his breathing being less laboured, and in the evening his temperature fell from 103° to 101°. He passed a quiet night.

11th.—The expectoration has diminished. Pulse 108; temperature 98°; respiration 24. Marked resonance and breath-sound with crackle are detected as low as the nipple anteriorly, and above the spine of the scapula posteriorly. Below these points there is dulness and absence of vocal fremitus. There are no signs of air in the pleura. The tubular sounds and bronchophony in the first intercostal space have entirely disappeared. Each side measures 16 in. through the mammary line, being a diminution of 1½ in. on the right side. The patient's appetite being bad, an additional pint of milk was ordered and two ounces of brandy; and a few days later fish was substituted for meat.

On the 14th the temperature rose, the morning being 99·8°, the evening 103°; pulse 116; respiration 32. On the 17th the swelling in the right mammary region had increased in size and become very painful. Pus began to ooze from the wound. He was ordered two grains of quinine twice a day in dilute sulphuric acid. Port wine was substituted for the sherry, and a chop for the fish, half a pint of ale being added.

22nd.—Some improvement was noticed on the establishment of the discharge, the evening temperature having fallen to 100°, and the pulse to 108; but the patient is suffering great pain and shortness of breath. The swelling has much increased, and is very red and œdematous. At my request Mr. Bartlett, the assistant medical officer, opened the swelling with a bistoury, between the fifth and sixth ribs, an inch to the right of the nipple. Much pus streamed out, the abscess communicating with the pleural cavity. The next day the discharge ceased from the primary opening, but flowed freely from the abscess. He began to complain of sore-throat, this symptom afterwards developing into tonsillitis, which had subsided on the 26th. On the 25th it was found that the dulness commenced an inch below the right nipple, and above this point good breathing was audible on the patient sitting up.

28th.—Patient is free from pain; sleeps well; the wound discharges copiously. Morning temperature, 99·8° F.; evening, 101·8° F. Pulse 120; respiration 24. On probing the wound, a channel was found, passing probably between the two sets of intercostal muscles, and communicating with the primary opening, and thus with the pleura. This was a point of some importance to ascertain, as it explained, firstly, why the discharge from the primary opening ceased; and, secondly, why the pus had not become offensive, the muscles acting as a valve, and preventing the entry of air. After this the discharge increased.

On the 5th of August it became offensive, the morning temperature rising to 100°, the evening to 102°; pulse 104; respiration 24.

Aug. 7th.—The patient was seen by Dr. Tatham in my absence. He sleeps well, and is not disturbed by cough or dyspnœa. On the right side creaking friction is heard at the anterior and posterior apex; breathing is audible posteriorly, but there is dulness from spine of scapula to base of lung; percussion hyper-resonant from clavicle to nipple; harsh breath on either side. His appetite being poor and spirits much depressed, Dr. Tatham ordered him a pint of champagne, and had him placed on a spring bed.

17th.—Appears much worse, and has lost flesh considerably; aspect has become more anxious; the discharge is not so free, and strongly offensive; skin of the right side is very red, partly from oakum dressing; dulness has increased in right front, but percussion and breathing are good at apex. Right side measures 15½ in., left 15 in. Temperature, morning 100·2°, evening 101·2°; pulse 112; respiration 24.

21st.—Complains very much of scalding pain caused by the pus which oozes from the wound, and is offensive. Temperature: morning 101°, evening 100·7°. As the discharge was by no means free and had become offensive, and as the patient was losing ground, at my request Mr. Henry Smith (in Sir W. Fergusson's absence) saw the patient, and at 3 P.M. on the 22nd of August made a counter opening between the seventh and eighth ribs, two inches to the right of the spine; he first having passed a long silver probe into the anterior opening, carrying it across the chest until its point could be felt, and then cutting down upon it. A seton was passed from the opening in front to that behind, and at first no discharge came from the new aperture; but at 10.15 P.M. fetid pus flowed copiously through both openings, mostly through the front. Temperature 100·6°; pulse 120, small; respiration 32. Patient to continue champagne, but to take four ounces of brandy, and, if possible, to eat a double portion of chops daily.

24th.—The discharge is so copious that it soaks through everything, and amounts to some pints in the course of the day; it is so intolerably offensive that the patient has to be kept in a separate ward, and the smell appears to overpower him and anybody who happens to be present. He cannot sleep, perspires profusely, and seems much exhausted. Morning temperature 99·3°; pulse 120; respiration 32. At 3 P.M., at my request, Mr. Smith passed a drainage-tube from the front opening to the back, and in-

jected into the side a solution of carbolic acid (1 part in 40). In the evening the patient complained of much pain in both openings, and a great deal of puriform fluid came through the front tube. The temperature fell to 99·1°—the first time it had been below 100° for six weeks; pulse 118; respiration 32. The quantity of brandy was increased from four to six ounces a day.

25th.—The change in the patient from yesterday is quite wonderful. He has slept well, and is free from pain and discomfort. The discharge is reduced to a small amount, and is slightly tinged with blood flowing chiefly through the posterior opening; the fetor is entirely gone. Temperature: morning, 98·6°; evening, 99°. Pulse 104; respiration 24.

26th.—Sleeps well; aspect greatly improved; discharge less; hyper-resonance over the front of the right chest as low as the fifth interspace, where dulness commences; good breathing over the whole anterior surface, with some crepitation in the lower fourth. A dessert-spoonful of cod-liver oil was ordered with the quinine twice a day.

Sept. 4th.—Has been injected with carbolic-acid solution every morning since Aug. 24th, and has steadily improved. Appetite is very good, and the patient is gaining flesh. Discharge slight, of a thin consistency, and not in the least fetid. The morning and evening temperatures have been normal during the last week; pulse 90; respiration 24.

On the 7th the physical signs were: Good breathing and fair resonance as low as one inch below the right mamma, dulness and deficient breathing commencing beyond this point; metallic tinkling audible in the right axilla; less dulness behind than in front. The right side measures 15½ in., the left 16½ in. The champagne was stopped, and a pint of porter substituted; the brandy was gradually discontinued, and he was allowed a glass and a half of sherry.

29th.—Better; getting fat. Breathing free, but harsh above the mammæ; friction-sounds an inch below. Weight, 8 st. 5½ lb. A few days later Mr. Henry Smith examined him, and could hardly believe him to be the person on whom he had twice operated. He said he had never witnessed "so complete a resurrection."

Oct. 14th.—Dr. C. J. B. Williams, who had seen the patient shortly after admission, again examined him, and was much astonished at his progress. He found the physical signs similar to the above, and suggested that the carbolic-acid injection should be used less frequently. It was accordingly done on alternate mornings.

22nd.—The discharge has increased; cough is more troublesome. Injection to be repeated every morning.

25th.—Cough and discharge have subsided into the previous state.

Nov. 16th.—Has been increasing in fat, especially over the thoracic wall, where it is now difficult to detect the ribs. The discharge continues, but is very slight. The tube is still retained. The quantity of carbolic-acid solution which can be injected is about two ounces, which shows that the pleural cavity must be to a great extent obliterated, and that only a small portion of secreting membrane remains. There is much flattening of the right side, especially below the nipple. The right side measures 16 in.; the left 17½ in.: the increase being chiefly owing to accumulation of fat. He has increased 9 lb. since last weighing, being now 9 st. Dulness commences an inch below the nipple in front, and at an angle of the scapula behind, and increases in intensity downwards, being most perceptible along the lower margin of the ribs. Anteriorly, respiration is good as low as the nipple; for two inches beyond some friction-sound is audible; below this respiration is absent. Posteriorly, it is indistinct below the scapula.

The following week the patient was sent to Eastbourne with the tube still in his chest, having been instructed to continue the carbolic-acid injection himself.

Few cases on record exemplify more strongly than this one the advantages of the use of Chassaignac's drainage-tube in empyema. A curious point in the case was the course which the pus burrowed for itself between the external and internal intercostal muscles before it pointed in the form of an abscess externally, the muscles seeming to act as a valve opposing the entry of air, and thus preventing the discharge from becoming foul. The increased pressure of the fluid rendered the valve inefficient, air was admitted, and the discharge became offensive.

Park-street, Grosvenor-square, Jan, 1872.

CLINICAL MEMORANDA.

By C. S. JEAFFRESON, M.R.C.S.,
ASSISTANT-SURGEON TO THE NEWCASTLE-UPON-TYNE INFIRMARY.

REMOVAL OF FOREIGN BODY FROM THE BLADDER BY MEANS OF THE LITHOTRITE.

A GENTLEMAN came under my care suffering from a chronic form of inflammation of the urethra and several strictures. After prolonged treatment, a No. 7 elastic catheter was passed into the bladder, and he was directed to retain it for several hours. Being in a sleepy condition when he withdrew the catheter, he placed it by his bedside till the following morning. On making my visit I found that the catheter was minus about six inches of its end. The patient felt sure that he had withdrawn the whole, and that the catheter must have been accidentally broken. No anxiety was felt, especially as a careful examination of the bladder failed to indicate the presence of a foreign body. In the course of a few months, however, violent symptoms of cystitis set in, but these abated considerably under treatment. Repeated examinations were made by myself and several of the most eminent surgeons in London, under chloroform, with both sound and lithotrite, with the view of detecting the presence of a foreign body, but without success. One morning, whilst examining with a lithotrite, I found that I had grasped something; but, having screwed up the blades to their utmost extent, I found I could not withdraw the instrument from the bladder. The dilemma was an awkward one. In vain I opened the lithotrite and attempted to free the end from whatever had become impacted between the blades; it was useless. Under these circumstances, I determined to withdraw, if possible, the foreign body in the grasp of the instrument, and after a good deal of coaxing and the exertion of considerable force, I withdrew a portion of the end of the catheter which had previously been missed. It was coated with a thick layer of phosphatic material, having been two years in the bladder. Fortunately, its extremity had been grasped by the lithotrite, otherwise serious damage must have ensued in its removal. As it was, no evil resulted.

After a week's repose, during which repeated injections of weak nitric acid were employed to get rid of the small portions of calculous matter detached from the foreign body, a further search was made with the lithotrite, and another portion of catheter, about an inch and a half in length, removed. The bladder now seemed perfectly free, and the patient is making satisfactory progress.

After the fragment of catheter had been extracted it was immediately obvious how it had been impacted in the grasp of the lithotrite: on screwing it up, the calcareous matter had given way, and the soft pulpy material of the catheter coming between the blades had become so firmly wedged into the interstices at the end of the female blade that even out of the bladder it was found difficult to remove it.

SYPHILITIC PTOSIS AND PARAPLEGIA.

Within the last few years lesions of the nervous system depending upon syphilitic poisoning have been especially dwelt upon by many writers. These effects generally belong to the class of what are termed "tertiary affections"; and the length of time which elapses between the primary disease and resulting nervous disorder is frequently so great as to cast a shadow of doubt upon their origin. The present case is especially valuable as occurring very shortly after the absorption of the syphilitic poison, and during the time whilst other effects of it were manifest in the system.

Mr. F—— came under my care during the month of September, 1871. He was suffering from complete paralysis of the third nerve on the right side. This was attended with slight headache and feeling of sickness. He had no gouty or rheumatic diathesis, and had not been exposed to cold; but six months previously he had had chancre upon the penis, which had been followed by sore-throat and a copper-coloured papular rash, traces of which still remain about the face and shoulders. He was directed to take a Plummer's pill at night, and large doses of iodide of potassium were administered, a blister being applied behind the ear.

In three weeks the ptosis had disappeared; and for a time he seemed quite well, and resumed his ordinary occupation. A month later he again applied to me. On this occasion he complained of pains in the back and lower limbs, a difficulty in making water, and a feeling in his legs which he described "as though his feet were made of lead." These symptoms gradually increased; and in the course of a few days he could scarcely raise either limb above an inch from the ground, the urine constantly dribbling from him. Sensation in the lower extremities was not completely abolished, but so perverted that he could never tell with certainty what part was being touched.

I now placed him again under the influence of the iodide of potash, painting the whole length of the spine night and morning (until it became sore) with a strong solution of iodine; and with these remedies I combined the use of the Turkish bath twice a week. Under this treatment he rapidly improved, and in the course of six weeks he became perfectly well and strong.

Newcastle-upon-Tyne, February, 1872.

ON TOXICOLOGICAL INVESTIGATIONS IN MEDICO-LEGAL CASES, AND ON EVIDENCE IN COURTS OF LAW.*

By ALBERT J. BERNAYS, Ph.D.,
PROFESSOR OF CHEMISTRY AT ST. THOMAS'S HOSPITAL.

I am happy to have an opportunity of bringing this subject before the officers of health of this great city, as I cannot picture to myself a body of men so much concerned in the matter, or so capable of forming a sound judgment upon it. With the opinions I hold some of my friends are well acquainted, as I have frequently debated them during the last twenty-five years. Whatever may be your estimate of their value, I desire to place them formally upon record, and I trust that they may receive attention beyond the limits of this place.

As to the reception of evidence in our law courts, I little thought that such a commentary as that furnished by the cases of the Rev. Selby Watson and of Miss Christiana Edmunds would be supplied by way of illustration; but these are so fresh in the thoughts of us all that I feel myself relieved from the burden of much explanation. This, however, I will add, that the evidence of the experts, especially in the case of Miss Edmunds, was received in such manner as to constitute a disgraceful feature in the trial.

Speaking, however, as a student of chemistry, with considerable experience also in toxicological analysis, I shall commence by calling attention to the precautions which should surround the investigation of medico-legal cases.

In the first place, I should say that in all cases of suspicion, where the symptoms call for inquiry, the post-mortem examination should always be conducted by an expert, in presence of the local medical man. I mean that the truth should be established by at least two, if not three witnesses. These two then should settle between themselves, before commencing operations, the method of procedure. Nothing should be left to haphazard. Whatever evidence is to be given should be at once taken down in writing, and signed by the witnesses. Supposing every proper preparation to have been made for an analysis, who is to make it, and how is it to be conducted?

Whatever our opinions may be as to the necessity of the work being performed by a medical man or a chemist, in this at least we shall agree, that the analysis should be executed by a practised hand. Viewing the matter as a chemist, from my standpoint I can see no reason for refusing the employment of such a one because he is not qualified to practise medicine. He may be as well read in physiology, and he is almost certain to have more experience in analysis. Whilst his views upon the effects of a poison might be received as simply his opinion, the discovery of the poison might be safely left in his hands. Very few medical men, unless they devote themselves to the practice of chemistry as a profession, can trust themselves to execute an analysis, whatever their theoretical knowledge may be. In addition to this, it will probably also be granted that no medical man in practice can find the necessary time for the work without neglecting his more usual sphere. It is for these reasons I maintain that the analysis should only be undertaken by one who is habitually experimenting. This precaution is as necessary with the chemist as with the physician possessing chemical knowledge. It is quite as possible that the chemist might fail as the physician, for some chemists are only theoreticians, and quite incapable of executing with their hands the behests of the brain. If the work to be done is physiological rather than chemical, then the workers should be physicians. But one of my strong points, as I regard the matter, is this,—or rather, I ought to say, one of the points I wish to urge is this: *the analysis should not be left to any one individual, whatever his talents may be.* The good chemist may be a bad microscopist and nothing of a physiologist; the experienced physician may be practically ignorant of chemistry, and anyhow may not have kept pace with the improved methods of analysis. I would therefore recommend that the work of thought and act should be carried out by three persons. Of these three, two should be experienced in chemical analysis; and the jury of experts that I would select would be, the local physician, a chemist with a medical degree, and a practising chemist. If there be not two practical men to execute the analysis, then I can see no reason to recommend any change in the present system. If the work is done by a chemist, medical or otherwise, and his assistant, then, if the latter is capable of being employed in a scientific capacity, he should also be associated publicly with the results of the analysis. In this way I would give proper encouragement to assistants, and thus to science also.

Supposing, then, it be decided that the truth shall be established by the mouth of two or three witnesses, the work would be undertaken under a sense of responsibility, which at present is very much wanting. Before even the receptacles were opened, a consultation would have taken place as to what was to be done. And here comes in one of the great advantages of the scheme. The pure physician might say that he required a certain portion of the contents of the stomach, as a test of the wholesomeness or otherwise, to give to some animal. The chemist might object on the ground that such might not be injurious to an animal, and that the material at hand might possibly be only sufficient for the variety of analysis required. He might further add that, if an alkaloid were present, he could offer it after a time in a condition of purity which would not admit of doubt if given to an animal. From the symptoms pointed out by the physician, the animal to be selected for experiment would be resolved upon. Thus, if strychnine were the suspected poison, the frog would be the first thought. Nothing would be left to accident—nothing to after-thought. Every method of analysis would be settled, and every preparation made, before the work was entered upon.

If we should, then, agree upon these preliminaries, an important question remains: Who are the physicians and chemists to be called in in such inquiries? And here I must be allowed to protest most vigorously against that principle of centralisation which has hitherto so much prevailed. Why should not the country be mapped out in the same way as at present in the case of coroners' districts? If a competent person reside in the district, it would not be unfair to the coroner to consider it his duty to call upon such person to perform the analysis. If this were a settled principle, there would be much more encouragement to men of science to settle down in different parts of the kingdom. Instead of all analytical work being given to two or three men, however able, the opportunities thus afforded would train up other men of experience. It is not consistent with common sense to say that *A* is more experienced than *B* if you never give *B* a chance; all experience centres in *A*, and much of it dies with him. The similar assertion, that *B* is not so well known as *A*, is self-evident. A person can never learn to swim if he never goes into water.

Provided, then, these things are settled or capable of arrangement, another matter occurs to me, for which I would also venture to offer a solution. In certain cases a dispute

* Paper read at the meeting of the Metropolitan Association of Medical Officers of Health.

may arise between interested parties, not only as to whether poison has been given, but it may be the interest of one party to *prove* death by poison, and of the other to prove natural death. Such a case would be of rare occurrence, and would probably be only applicable to animals. Let me adduce an illustration. An ox has been grazing on a field in which it might possibly come by its death through metallic poison. If the event took place, it would be the interest of the farmer to prove that the animal thus died; and equally would it be the interest of the mining agent to elicit the contrary fact. Now in a case like this, is the analysis to be left to one individual, and is judgment to be given according to his results? Let me show the fallacy of such an arrangement. It may be a trumped-up case; the poison may have been put in beforehand. Although such a thing may be of rare occurrence, it has already happened, and may happen again. [Case stated.] This would show the necessity for some different arrangement in the method of analysis. The interests of both parties would be provided for, in that the results of the analysis would depend upon the evidence of three witnesses.

Another question arises: Is it advisable to give to the chemists engaged any information as to the nature of the suspected poison and as to the medicines which may have been given? I cannot help thinking that it would be desirable, as well as a matter of expense as of actually preventing an arrival at incorrect conclusions. In the first place, it would be a saving of expense, as in most cases the labour involved would be lessened. In the second place, it might prevent the finding of the real poison by the discovery of a medicine which in overdose alone would be a poison. Speaking to men of science, I will not enlarge upon these points, as your own experience will immediately fill up the gaps which I intentionally leave for you.

And now comes, perhaps, the most important question. How is the evidence to be given? I confess, when I hear that the evidence which I shall give shall be the truth, the whole truth, and nothing but the truth, my heart sometimes fails me. I might give an illustration of personal experience, but there is really no occasion. Any one of us who may have been present in courts of law must have come away with the conviction that you may get plenty of law, but very scant justice. We know that in most cases the strife is for victory, rather than for truth. If we are rich we can buy the best defence, whether scientific or otherwise. Indeed, we may be so wealthy that we can employ all the chief scientific witnesses, and, therefore, leave to our adversary no defence beyond what he can elicit through cross-examination. In what conceivable way can we admit that we tell the whole truth, when we know that we go into the witness-box simply to tell *our* story? We may have heard from certain witnesses facts of which we had previously no knowledge, such as would have prevented us from giving evidence at all. The truth of our case is too much dependent upon the ability of our counsel either to suppress or overthrow evidence. I have seen a great case break down the moment the chief advocate left us, and I have seen the weakest case become strong through the able conduct of our adviser. As regards scientific witnesses, the great object of opposing counsel is to confound them. If a timid man, the blustering "so you mean to say sir" is quite enough to drive all the learning out of a witness's head. The less a man knows the more self-assurance he possesses, and, consequently, the more esteemed is his evidence. "Give me a man as a scientific witness who has no doubts," said a leading police inspector. Can it then be wondered at that some men refuse to be sworn, and, consequently, to give evidence? I have a friend great in science, but I know that nothing short of a subpœna would ever induce him again to give scientific evidence in a court of law. From his great knowledge he makes a bad witness. He sees the bearings of questions, and naturally fences with them so as not to compromise himself. But seat him at a table, in a quiet room, with pen, ink, and paper, and you would not find a man who could better sift a case.

I cannot help thinking that the better mode of giving evidence on the part of experts would be in writing. I would give every facility for *viva voce* examination on the part of the judge, and would allow counsel to suggest questions. But the conclusions the scientific witnesses have come to should be at once recorded in writing, signed, and, as long as the barbarism is thought necessary, sworn to.

And in matters concerning the public health, of which you are the appointed guardians, do you not think that the proof or otherwise of a nuisance would be arrived at with greater certainty, and with far less expense, by a jury of experts than by the present system? How often does it not occur that more money is wasted upon witnesses than would be required to put chemical works into substantial repair! How frequently is undeserved ruin the penalty for the *defence* of unscientifically conducted chemical works!

What then, according to my imperfect view, is the conclusion of the whole matter?

1. That greater safeguards should be established in obtaining evidence.

2. That no chemical analysis involving life and death should be left to the discretion of any one individual.

3. That the selection of the experts, whether medical, or chemical, or both, should be made from a wider sphere.

4. That the evidence of such men should be taken in writing, and published before the trial, so that no one may be taken by surprise, and to give opportunities for the preparation of an answer.

5. That the examination of scientific witnesses be entirely left to the discretion of the judges, and that counsel be only allowed to suggest questions to the judges, and not put them themselves.

6. That in nuisance cases, the matter in dispute be referred to seven men, medical and chemical, three to be selected on each side, the seventh to be appointed by both sides, and these seven to be exclusive of the medical officer of health who has probably reported the case. And that only in case of non-agreement, the matter be brought to public trial.

I have intentionally made short work of this paper so as to give proper opportunities for debate. I believe the subject to be an important one, and that the opinions, in part at least, are not new to many, especially not to Dr. R. A. Smith. But I am not conscious of having taken them from any one, for I have held them and broached them many times for long years past. To us the question is alone pertinent, not is it new, but is it true? Let us regard it in that light, and deal with the matter, and not with the individual who brings it forward.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

PERIPHERAL HEMIPLEGIA.

(Under the care of Dr. ANDREW CLARK.)

THE following case, for much information concerning which we are indebted to Mr. M'Kenzie, the resident medical officer, seems to agree in most particulars with the disease described by Todd under the name of "peripheral hemiplegia." In a footnote to Todd's account of this disorder, a case (recorded by Dr. Cheyne) is recited which very closely resembles the one under consideration.

The patient is a man thirty years of age, a musician. His general health is, and always has been, very good. There is no evidence of a syphilitic taint. Two years ago he began to be troubled with an inability to lift his right toes, which were constantly troubling him by catching in the carpet or other obstacles. This was followed by a gradual loss of power over the right leg. Fifteen months later he began to find some difficulty in manipulating his violin bow; and since that time loss of power in the right arm has gradually supervened. At the present time there is some loss of power over the left limbs as well, but chiefly of the leg. There is no facial paralysis; but there is a

general want of expression in the face. His mental state is not markedly affected. He talks rationally and sensibly about his ailment. The tongue is protruded forcibly in the middle line, and the ophthalmoscope shows a healthy condition of the fundus oculi. There is no loss of power over the sphincters; but he is rather troubled with constipation. At present his mode of progression is very striking. He uses a stick with his left hand, and advances his left leg first, slowly and cautiously. The right leg is then brought forward with a regular hemiplegic swing, the left shoulder is protruded at the same time, and the head turns to the left. He has no appreciable loss of sensibility of either the arms or the legs. At no time has he been troubled with any numbness, tingling, cramps, or spasms of the limbs. He is fairly nourished, and there is no marked wasting of any of the muscles.

OVARITIS; TETANY.—SIMILARITY BETWEEN OVARITIS AND TYPHOID.

(Under the care of Dr. RAMSKILL.)

In the wards set apart for female venereal patients we saw a case which seemed to answer in all respects to the disease described by Trousseau as "tetany." The patient was a female twenty-four years of age. She had been admitted for gonorrhœa, and subsequently had suffered from ovaritis. In addition to the inflammation of the ovary, she had suffered from diarrhœa, and during the attacks of diarrhœa she had been subject to tonic contractions of the extremities—the hand assuming the shape (as Trousseau described it) of the accoucheur's hand, the fingers being stiffened out and the opposite edges of the palm drawn together. Trousseau described the disease as being most common in, in fact almost limited to, the female sex, and as particularly liable to occur during periods of sexual excitement. He further states that diarrhœa is a common exciting cause of the spasmodic contractions. In this case we have all the favouring conditions brought together in a marked degree.

There were in the ward several cases of ovaritis, and it was pointed out to us that occasionally there was considerable difficulty in diagnosing between this condition and typhoid fever. We saw one case, in particular, in which for twenty days there had been a temperature ranging between 99·5° and 105°. There had been considerable dulness of intellect during this period, together with marked tenderness in the right iliac region and considerable diarrhœa, the stools being very like those characteristic of typhoid.

CASE OF KELOID TREATED BY IODIDE OF POTASSIUM.

(Under the care of Dr. DAVIES.)

Our attention was also called to a man suffering from a considerable development of keloid in some old syphilitic scars with which his body was pretty freely sprinkled. The keloid was rapidly disappearing under treatment by ten-grain doses of iodide of potassium. He had, as well, a tender node upon the forehead.

CHARING-CROSS HOSPITAL.

CASE OF PARALYSIS IN A SYPHILITIC SUBJECT TREATED BY LARGE DOSES OF IODIDE OF POTASSIUM; CURE.

(Under the care of Dr. JULIUS POLLOCK.)

THE following case presents many points of interest. The paralysis, though strange and anomalous, was unusually extensive and complete, affecting, not only the limbs and the face, but the muscles of deglutition as well. The patient presented unmistakable marks of constitutional syphilis, which, there can be little doubt, was contracted eighteen years ago, and his body was covered with a number of scars which had probably resulted from the healing of rupial or ecthymatous ulcers. Further, he had a previous similar paralytic attack four years before. And, lastly, his recovery was complete and rapid, though, on admission, his appearance would have justified the gravest prognosis.

J. S——, a bricklayer, was admitted to the hospital on November 25th. He was a fairly strongly-built man, but of a pale and cachectic aspect. The legs and part of the abdomen and back were covered with large scars. He had considerable loss of power over his legs; he could not stand upon them; but when lying in bed he was able, with some difficulty, and very slowly, to raise his feet and to bend his knees. There was less power in the left than in the right leg. There was, he said, considerable impairment of sensation in the legs, but it was nowhere entirely absent. Tickling the soles of the feet caused no reflex movement. There was a similar condition, but infinitely less in degree, of both arms, and marked paralysis of the left facial nerve. The left orbicularis palpebrarum hung in a fold on the left upper eyelid, depressing it, and giving the appearance of ptosis; but there was no real ptosis. The left pupil was rather larger than the right; no squinting. The tongue protruded in the middle line; no paralysis of palate. Some headache, referable to no particular spot. He was unable to read for long at a time, because the lines ran together. Had considerable difficulty in swallowing, even liquids. He said: "The swallow seems to go all of one side, the same as the face, and seems to stop about the middle of the throat." A slight feeling of tightness round the chest; a dull pain in the back, and some tenderness, most marked in upper dorsal and sacral regions. About a week before admission he suffered from cramp in the calves of the legs. When he moved his legs he complained of pain up the back of the thigh, but there was no cramp of the muscles. Obstinate constipation, but no urinary affection.

There was a distinct history of syphilis, contracted probably in 1854; no history of any injury to the spine. He was in the hospital four years ago with a similar attack to this, from which he completely recovered. The present attack began a week before admission. It commenced with pins and needles in the feet, and he attributed it to his having caught cold.

This patient was treated with large doses of iodide of potassium—thirty or forty grains three times daily. He was discharged in the middle of January, after a sojourn in hospital of about two months; and at that time he could walk without difficulty about the ward, the only paraplegic symptom being a slight numbness of the legs, which was fast disappearing. The facial paralysis was slightly evident, but in all other respects the man was perfectly well.

KING'S COLLEGE HOSPITAL.

STONE IN THE BLADDER, COMPLICATED BY STRICTURE OF THE URETHRA; LITHOTOMY.

(Under the care of Mr. HENRY SMITH.)

AN unusually interesting case of stone was operated upon by Mr. Henry Smith on February 3rd. The patient was an old man who had been under Mr. Smith's care from time to time suffering with retention of urine, the result of a tight stricture of the urethra. A catheter had occasionally been passed both by Mr. Smith and the house-surgeon, but there had not been any suspicion of the presence of a stone until a recent occasion, when Mr. Smith passed a catheter and struck the foreign body. The urethra and bladder were in a most irritable condition, and the urine was loaded and alkaline. A No. 6 catheter could be passed with some difficulty. The stone did not appear to be a large one, but lithotrity was pronounced to be out of the question, and it was decided that so soon as a further dilatation of the urethra could be effected lithotomy should be performed. During the ten days that the patient was in the hospital the symptoms increased to a great degree, and so little dilatation could be effected that a No. 8 catheter was the largest which could be introduced.

When the man was placed on the table and put under the influence of chloroform Mr. Smith was enabled to pass a No. 8 staff, and upon this he guided the knife into the bladder. On introducing the forceps, and seizing the stone, it broke to pieces under the pressure of the instrument, and it was needful to introduce it as well as the scoop several times before all the fragments of the soft phosphatic calculus could be brought away.

In some remarks Mr. Henry Smith called attention to the special features of this case. In the first place it illustrated the fact that a patient suffering with a tight and irritable stricture might have the symptoms so pronounced that the existence of a much graver malady might be overlooked until it was accidentally discovered. Then the complication of stone with stricture necessitates a modifi-

cation of the operation; for with a stone not bigger than a chesnut lithotrity should, as a rule, be adopted; but this proceeding was out of the question when the canal was so contracted and so irritable that it would, in the first place, be almost impossible to introduce a lithotrite without injury, and if the stone could be crushed the fragments would not pass or be brought away without great suffering and danger being produced. Another modification of the operation might be adopted, and at one time he had thought about doing this—namely, cutting down upon a staff grooved in the middle, dividing the stricture, and carrying the finger into the bladder after the manner practised by Allarton; but on second consideration he determined to use the lateral operation, which of course was rendered a little more difficult than usual in consequence of the staff being so much smaller than one ordinarily employs for an adult. He expected to find that the stone was phosphatic, and would break to pieces under the pressure of the forceps—a matter also which always renders the proceeding somewhat difficult.

We have since learned that this patient is making rapid and satisfactory progress.

GREAT NORTHERN HOSPITAL.

IN our "Hospital Mirror" for Dec. 9th, 1871, will be found a description of a severe case of *Rodent Ulcer* under the care of Mr. John Gay. We are now able to report that the case entirely yielded to the treatment by large doses of iodide of potassium, which we mentioned at the time was having a most salutary effect. The iodide has been given in doses of half a drachm three times daily, and the patient has got completely well. She is sixty-eight years of age, and the disease had been in progress twenty-two years. At no period of the treatment have symptoms of iodism been induced. We are further informed that there is no reason to suppose that the origin of the ulcer was in any way referable to a syphilitic taint.

THE GENERAL INFIRMARY, LEEDS.

THREE CASES OF WOUNDS OF JOINTS.

(Under the care of Mr. HEY and Mr. JESSOP.)

WE are very glad to bring before the notice of our readers the three following cases of injuries to joints which have all terminated favourably. They will be read with great interest by all who perused Mr. Couper's case of injury to the knee-joint which we reported a week or two since. It will be seen that the antiseptic treatment was strictly followed only in the first two cases, but that the result was equally favourable in all of them. The first case was undoubtedly the gravest. Injuries to joints, except as part of very severe injuries, are not common, and we here repeat that we shall be glad to receive details of any similar cases.

We are indebted for the notes of these cases to Mr. McGill, the resident medical officer.

CASE 1. *Wound of the ankle-joint.*—J. B——, aged thirty-five, was admitted under the care of Mr. Hey on Aug. 2nd. There was a wound one inch long situated over the left internal malleolus; through this wound it could be felt that the malleolus was broken, and that the ankle-joint was opened, the finger passing between the tibia and the astragalus. There was also a small wound on the anterior part of the ankle which did not communicate with the joint. The accident was caused by a block of stone falling on to his leg.

The joint was syringed out with carbolic lotion (1 to 20) and the antiseptic dressing applied with all care in the usual manner. The leg was placed on a swing cage. The antiseptic dressing was continued for a fortnight, by which time the wounds were healed without suppuration. On the evening of the first day the temperature was 100°; it was never any higher, and was normal by the fourth day. The splint was kept on for a month. The patient was discharged with the leg in a plaster-of-paris bandage on September 5th. He is now walking about with a perfectly moveable joint.

CASE 2. *Wound of the knee-joint.*—J. S——, aged thirty-one, was admitted July 2nd under the care of Mr. Jessop, with a wound four inches long across the thigh, one inch above the patella; through this the finger could be passed into the joint, and the posterior surface of the patella plainly felt. Round the lower and inner sides of the patella were three other wounds, each about one inch long; no communication of these with the joint was made out. The injury was caused by the patient falling with his knee bent through an earthenware pan.

A back splint was applied. The antiseptic dressing was applied, but the joint was not syringed out with carbolic lotion. The antiseptic dressing was continued for eleven days, by which time all the deep part of the wound was healed, and a small superficial granulating surface was left. Twelve hours after the accident the temperature was at its highest, 99·8°; it became normal by the fifth day. The pulse was never above 92. On July 30th the splint was removed. The patient was discharged a few days after; he now walks with a movable joint, without any limp.

CASE 3. *Wound of the knee-joint.*—P. M——, aged twenty-nine, admitted Jan. 26th, under the care of Mr. Hey, with a small perforating wound below and to the outer side of the patella, through which synovia was flowing. A probe could be passed up into the joint through the opening. The wound was caused by the man falling three feet on to a sharp-pointed iron rod belonging to some machinery in a flax-mill.

A back splint was applied, and the wound left uncovered. After twelve hours, as the discharge of synovia still continued, carbolic acid and glycerine was applied, and was changed daily for a week; no precautions, such as are used in the antiseptic dressing of wounds, were observed. The wound healed entirely in two days. The temperature reached 100·2° on the third day, when there was some effusion in the joint, but became normal two days after. Now (February 11th) the effusion is all gone, the splint has just been removed, and the movements of the joint are perfect. The patient will probably be discharged in another week.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEB. 13TH, 1872.

T. B. CURLING, F.R.S., PRESIDENT, IN THE CHAIR.

ON THE CEREBRAL MECHANISM OF THOUGHT AND SPEECH.

BY W. H. BROADBENT, M.D., F.R.C.P.,
PHYSICIAN TO ST. MARY'S AND THE FEVER HOSPITALS.

THE objects of the paper were stated to be, by means of the light thrown upon cerebral physiology by cases of loss and derangement of speech, to construct a theory of the mechanism of thought and language, and to connect this with the facts of cerebral structure so far as known.

Ten cases were related in the first place, of which the most interesting were—

1. A case of right hemiplegia with loss of speech and writing. The hemiplegia temporary; the loss of speech permanent, except as to a few words mostly used in the expression of feeling; loss of writing absolute. She was, however, able to read; and displayed great energy and resource in recovering the control of her property, of which she had been deprived under the idea that she was imbecile. On post-mortem examination three years after the attack, two apoplectic cysts were found in the upper margin of the fissure of Sylvius of the left hemisphere: one in the posterior part of the third frontal convolution; another further back, the latter involving also some convolutions of the island of Reil.

2. A case of abscess in the left frontal lobe, not affecting the surface of the third convolution or the island of Reil, but involving the white substance of the third frontal gyrus deeply. The order in which the symptoms appeared was—slight paralysis of right face; then incipient loss of speech and writing; a few days later total loss of speech and writing, with right hemiplegia; subsequently partial recovery of speech.

7. A case of congenital aphasia without idiocy in a boy aged twelve, who understood all that was said, could be sent on erranda, &c. could write his name, and copy from

printed into written characters, but could not speak except to say "yes," "no," "father," and "mother"; indistinctly answered "kreigur kruger" to all questions; could not write the simplest word, such as "no" from dictation, or understand the simplest written question, but could write and understand figures:

8. A case in which an intelligent man, after head symptoms, completely lost the power of reading either printed or written characters, while he could write readily and correctly from dictation or spontaneously. His conversation was good and his vocabulary extensive, but at times he was at a loss for a name, and he was quite unable, when asked, to name the simplest and most familiar object presented to his notice. The loss of power to read was of course a part of this more general loss of power to name. He died from hæmorrhage into the left temporo-sphenoidal lobe, which penetrated into the ventricle. Two old hæmorrhages were discovered: one in the substance of the infra-marginal convolution of this lobe; another larger, which had apparently caused softening of the adjacent brain-substance, between the extremity of the fissure of Sylvius and the ventricle where the descending cornu is given off. The latter would involve most important fibres. The extent of softening could not be ascertained on account of the recent hæmorrhage into the same part.

The 9th and 10th were cases in which, with derangement of speech in the 9th and absolute loss in the 10th, there was loss of comprehension of words with ready interpretation of signs.

The cases related, so far as they bear on the question, are all corroborative of the view which assigns a close functional relation with language to the left third frontal gyrus; and, as the result of his own observation and of examination of many cases published as exceptions, the author considers this relation to be absolutely established, not, however, in the sense of its being the seat of a faculty of language, but as an important link in the cell and fibre mechanism for speech, which mechanism may be interrupted at other points above or below, as well as at this particular node.

The distinction established by Sanders, W. Ogle, Bastian, and others between amnesia and aphasia proper or ataxic aphasia implies lesion at different parts; and a further subdivision of amnesic cases may be made, Case 8 being used as an illustration. Here an object seen no longer evoked the appropriate name; the channel between the visual centre and the intellectual centre was interrupted. And if a similar interruption occur in the channel from the auditory centre to the intellectual centre, so that articulate sounds no longer revive the accustomed intellectual associations, the patient will on the one hand be incapable of understanding what is said to him, and, on the other, will have no check on his own utterances. The lesion will in a case of this kind be at a different spot from that which destroys the memory for words (amnesia), or the memory for the utterance of words (aphasia).

The results of the author's careful examination into the course and distribution of the fibres in the cerebral hemispheres are, that the fibres radiating from the crus and central ganglia and the fibres of the corpus callosum are distributed almost exclusively to the convolutions of the longitudinal and Sylvian margins of the hemispheres, the intervening convolutions receiving no radiating or callosal fibres. These latter convolutions, which are thus withdrawn from immediate relation with the outer world, which are also those that are latest in order of development, and which make the difference between the human and quadrumanous brain, he considers will be those engaged in intellectual operations, receiving the raw material of thought from marginal convolutions at the summit of the sensory tract and employing in the expression of the volitional product of thought the marginal convolutions which are in fibrous connexion with the motor ganglia and tract.

The theory of the mechanism of speech and thought is a modification of that of Dr. Bastian,* agreeing with it that the materials of thought are remembered impressions, and not remembered movements, and that there are definite cell-areas in the hemispherical cortex in which impressions are translated into perceptions, which may be called "perceptive centres," but differing from it in relegating to these perceptive centres, which will be situated in the marginal convolutions, only the rudimentary perceptive act, and in making the higher intellectual elaboration by which an idea is evolved the function of a new cell-area in some of the superadded convolutions upon which perceptions from various senses are converged, and in which they are combined or fused into a conception of which a word is made the symbol.

A part of the general theory is an hypothesis as to the nervous change which is the concomitant of sensation, which is taken to be absorption of the force of the impinging impression and integration of matter in the cells concerned, which may be compared to the fixing of luminous vibrations by the green cells of plants. On this view, the seat of sensation would vary in different classes of animals, and at different periods in the development of the human intellect, gradually shifting upwards from the thalami to the marginal and superadded convolutions.

Considering first the mechanism of speech, words may be regarded from two different aspects—firstly, as motor processes; and, secondly, as intellectual symbols.

As movements, they will be represented by groups of cells in the corpora striata; and the grouping of the cells, taking place under the guidance of the auditory sense, which is bilateral, will also be bilateral—that is, motor cell-groups representing articulate sounds will be formed in both corpora striata. As the left third frontal gyrus, however, is the outlet for intellectual expression, the sound groups in the left corpus striatum will take the lead in speech, and thus, though speech is not lost in lesion of this corpus striatum, the temporary embarrassment is greater and lasts longer than in lesion of this ganglion on the right side, till the way round is opened from the left third frontal gyrus to the right corpus striatum, which will probably be by the corpus callosum and right third frontal.

As intellectual symbols, words are primarily revived auditory impressions, and are probably represented in the auditory perceptive centre by receptive cell groups. The auditory perception of a given name will be associated with other perceptions, to which the object indicated gives origin, in the cell-area which constitutes the higher centre, and will come to stand for the resultant of these impressions generally. The way out from this higher centre is seen from pathological evidence to be the left third frontal gyrus. Words other than names are intellectual agents rather than intellectual symbols; are employed in mental action, not impressed upon the mind in association with visual and other perceptions. We can thus approximately understand how names may be forgotten while the framework of a sentence is readily uttered, or even a periphrasis invented.

The action of the hemispheres is apparently necessarily bilateral as far as the formation of rudimentary perceptions, the marginal convolutions being symmetrically associated by the corpus callosum. The unilateral employment of the left hemisphere only becomes possible in the superadded convolutions, and the unilateral education of Broca and Moxon is a motor, or rather efferent, education only.

The mechanism of thought is so far prefigured in that of language that a detailed exposition of it need not be recapitulated.

Mr. POWER said that he wished to ask Dr. Broadbent one question, and that in order to make his meaning clear he would illustrate it by a diagram. An object, say a cube, was presented to a child; and the visual impression excited was communicated to the optic ganglia, by which it might be at once reflected downwards; but more commonly it was not reflected, but ascended to a higher centre. At the same time the name of the object was pronounced in the child's hearing, and the resulting auditory impression reached the auditory ganglion. If not there reflected, it likewise ascended to the higher centre. At the same time the child touched the object, and the tactile impression followed a course similar to that of the others. The three impressions, meeting in and combined by the higher centre, occasioned the formation of the complex idea of a cube, and this, operating downwards upon the muscles of articulation, led the child to say "cube." An arrest of this process on the sensory side of the combining centre produced amnesia; an arrest on the motor side of the combining centre produced aphasia. Where, in the whole, did Dr. Broadbent place the corpus striatum?

Dr. BROADBENT replied that he placed the corpus stria-

* Brit. Med. Jour., May, 1869.

tum between the combining centre and the muscles of articulation, as the organ by which the former acted upon the latter.

Mr. JOHN WOOD inquired how far the method of teaching the deaf to speak by watching the lips of others would harmonise with Dr. Broadbent's views.

Mr. SAVORY accepted the distinction drawn by the author between language and words; but objected that, on the view propounded, the mechanical act of speech was seated in centres which were comparatively more developed in the lower animals than in man. If that were so, he should expect the faculty of speech to be widely diffused among the lower animals, instead of being limited to a few birds.

Dr. WILKS expressed his general assent to the views of the author. The acquirement of language was a complex process; and might be imperfect in the sense that some of its ordinary factors might be omitted. Thus it was quite possible to learn a foreign language by sight only, so as to read it by the eye with perfect comprehension; while yet ignorant of its sounds, and unable either to speak it or to understand it when spoken.

Dr. BROADBENT, in reply, said that he had located the mechanical act of speech in the corpora striata, because he regarded those bodies as the centres of muscular movement generally. Mr. Savory was mistaken in supposing that they were comparatively more developed in the lower animals than in man. Their development, throughout the animal kingdom, followed very closely that of the cerebral hemispheres, and reached its highest point in the human species.

The meeting then adjourned, the President first announcing that the ordinary meeting for the 27th, the day of Thanksgiving for the recovery of the Prince of Wales, would not be held.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEB. 19TH, 1872.

DR. ANDREW CLARK, PRESIDENT, IN THE CHAIR.

DR. BELL TAYLOR read a papar on "The Statistical Results of the Contagious Diseases Acts." He said he proposed to inquire into the question whether the generally assumed impression is correct that the Contagious Diseases Acts have (whatever other arguments may be used for or against them) been successful in a sanitary point of view. The only trustworthy basis of such an inquiry are the returns made from time to time to Parliament respecting the health of the army and navy. If the year 1866 be taken—the year in which the first of the Acts at present in force was passed, and towards the close of which it began to be put in operation in a few places, the returns for which therefore could not be materially affected by the Act—and the last year for which we have returns be compared with it, to what extent will it appear that venereal diseases have diminished in the army and navy, taken as a whole? To this question, two tables, printed in the appendix to the evidence taken before the Royal Commission, enable us to give a simple and decisive answer. On page 815 is a table headed thus: "Return showing the effect of venereal diseases on the efficiency of the army serving at home during the ten years from 1860 to 1869 inclusive." It gives the ratio per thousand of men "constantly sick for enthetic diseases." The number for 1866 was 16·00. The number for 1869 was 14·87. Thus the total gain in the three years was a diminution of no more than one man and a trifling fraction in a thousand. It must be noticed at the same time that the number was higher both in 1867 and 1868 than in 1866, being close upon 18 per 1000 in 1867, and very nearly as high in 1868. For the navy we turn to a table given on page 816, put in by Dr. Armstrong. This table does not give the number of men constantly sick for enthetic diseases, but "the number of cases of venereal disease contracted by the crews of her Majesty's ships from 1856 to 1869 inclusive, with the ratio per thousand of force." From it we learn that the number of cases of venereal disease per 1000 in the navy, at home ports, was 101·3 in 1866, and 101·9 in 1869. Consequently, instead of a diminution there was an actual increase in the three years. In the two intervening years, however, the number was lower, being 92·9 in 1867, and 90·1 in 1868. The results laid before the Society are most important. It is impossible to explain them away. They go far to substantiate the views of those who hold that laws like the Contagious Diseases Acts of this country have never, and can never, permanently diminish the prevalence of venereal disease.

The PRESIDENT requested the members to confine themselves strictly to the subject of the paper, the sanitary effects of the Acts, and to deal with the figures brought forward, and the deductions drawn from them.

Mr. LANE referred to the case of a battalion of Grenadier Guards at Windsor, in which during four months there were 30 cases of disease; and during the subsequent four months passed in London the number of cases was 108. Also to the case of a battalion of Coldstream Guards, in which during three months at Windsor there were 14 cases; while in another battalion of the same regiment, during the same three months in London, there were 68 cases. His own experience convinced him that not only the amount but the severity of syphilitic disease had been diminished by the operation of the Acts.

Dr. DRYSDALE contended that unfaithful husbands were sometimes tempted to go to protected towns "to take the benefit of the Acts"; and suggested that, as these Acts would no longer be tolerated, Government should establish hospitals all over the country for all kinds of contagious diseases, including syphilis.

Mr. ACTON alluded to Dr. Armstrong's table (referred to by Dr. Taylor) showing an increase of 0·6 per 1000 in the case of venereal disease in the navy at home ports between 1866 and 1869, and pointed out that that increase was attributable to an addition of 17 per 1000 cases of gonorrhœa, there being an actual decrease of primary and secondary syphilis of 16·8 per 1000 This, he contended, was a most important proof of the efficacy of the Acts, the return relating to 23,400 men. Dr. Taylor, he said, had forgotten to distinguish between gonorrhœa and syphilis, and hence the error of his deductions. With regard to the army table quoted by Dr. Taylor as showing a slight decrease, he (Mr. Acton) was unable to show the causes of that decrease, as distinctions were not made between primary sores and gonorrhœa; but it no doubt depended on the cases of gonorrhœa being better looked up. It would be seen, however, from a table in the appendix (p. 815) that syphilis in the protected districts had diminished nearly one-half. In 1870 the proportion constantly sick with primary venereal sores was only 4·33 per 1000 of the strength, while in the unprotected districts the proportion was 7·94. The efficacy of the Acts was still more clearly shown by the number of admissions into hospital with primary venereal sores, which in the protected districts in 1870 were only 52·5, while in the unprotected districts they were 113·3 per 1000.

Mr. HENRY LEE, in speaking against the Acts, said that if they were extensively adopted, and applied to the whole community, in three-fourths of the suspected cases a medical man would not be able to say whether there was disease or not.

Mr. COULSON spoke in support of the Acts, and advocated a compulsory examination of all prostitutes throughout the country.

Dr. WEBSTER spoke in opposition to the Acts, which he contended were immoral in their tendency.

Dr. GIBBON argued in favour of the continuance of the Acts.

Mr. BERKELEY HILL referred to a table published in the appendix showing the number of men constantly in hospital for primary venereal sores and gonorrhœa at twenty-six stations of troops (distinguishing protected and unprotected) from 1866 to 1870. The entries in the unprotected stations in 1866 were 11¼ per 1000; in 1867, 13¼; in 1868, 13¾; in 1869, 15¼; in 1870, 12·7. The entries for primary venereal sores for these years were 6·35, 6·95, 7·40, 9·18, 7·94; and for gonorrhœa, 5·17, 6·57, 6·48, 6·21, 4·96. In the protected stations the entries were, in 1867, 12¾; 1868, 11¼; 1869, 9¼; 1870, 8¾: showing a gradual diminution, most of which was attributable to venereal sores, which decreased from 6·95 to 4·33. Mr. Hill also called attention to a table (appendix, p. 811) showing the ratio of admission for primary venereal sores and gonorrhœa at protected stations, in the year preceding the application of the Act, and in each subsequent year. In the first group of five stations, in the first year under the Act, the admissions were—venereal sores, 86; gonorrhœa, 130; second year, venereal sores, 69; gonorrhœa, 129; third year, venereal sores, 58, gonor-

rhœa, 107; fourth year, venereal sores, 54; gonorrhœa, 103. Before the Acts were put in force in the Borough prison, Devonport, the percentage on the aggregate number of prisoners was 1¼ for syphilis, and 2¼ for gonorrhœa; and after the passing of the Act the proportion was a half per cent. for syphilis, and 2 per cent. for gonorrhœa. It had been contended that the disease would be as readily cured under a voluntary as under a compulsory system; but facts disproved the assertion. At Devonport, for instance, before the Acts were put in force, 25 per cent. of the patients admitted into the Royal Albert Hospital left before they were cured, against the will of the authorities. And at Winchester, when the hospital was rebuilt, the authorities decided to have no venereal beds, there having been so few patients; but after the Acts were in force, of the first batch of women examined 43 per cent. were found to be syphilitic.

The discussion was continued by Mr. Myers, Mr. Curgenven, Dr. Murray (who spoke from personal experience of the value of the system of compulsory inspection at Hong Kong), Dr. Hare, Dr. Routh, Mr. Bond, Mr. Weeden Cooke, Mr. Deakin, and Mr. Carter; and was brought to a close by a reply from Dr. Bell Taylor.

Reviews and Notices of Books.

Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques. Tome XIV. ERYS—FL. Paris: J. B. Baillière. 1871.

THIS part contains thirty-six articles by twenty-three contributors, of which the most important are—"Erysipelas," by MM. Gosselin and Raynaud, the former of course treating of it in its surgical and the latter in its medical or idiopathic aspect; "Esthiomène," or rodent ulcer of the female generative organs, to the description of which M. Bernutz devotes a good paper; "Estomac," by M. A. Luton, giving its anatomy, physiology, and pathology very completely, and occupying nearly 150 pages; "Face," by A. Le Dentu and H. Gintrac—a still longer article; "Favus," by Hardy; "Fesse and Région Fessière," by Maurice Laugier; "Tissu Fibreux and Fibromes," by Alfred Heurteaux; and "Fièvre," by Hirtz. Amongst the shorter essays are those on "Ethers," "Ectases," "Exhumation," "Exophthalmie," "Falsification," and "Fer."

In regard to exhumation, M. Tardieu says, sadly, that recent events have caused this subject, and the proper mode in which it should be conducted, to be of great importance to the public health. Where practicable it should only be performed when the temperature is low; a large number of workmen should be employed at once, and any who sicken should be promptly replaced by others. The spades should have long handles, and disinfectants be freely used, as carbolic acid, the salts of iron, and chloride of lime. By the committee which met at Brussels, under the chairmanship of Count Orloff, incremation was successfully adopted. The Committee of Public Hygiene of France, which M. Tardieu presided over, recommended that a tumulus should be raised over the bodies, and that this should be planted with sunflowers, white mustard, and other rapidly growing plants requiring much azote for their nutrition.

The article "Estomac" is remarkably complete. It commences with a good description of the anatomy and physiology of the organ, though we can scarcely agree with the statement that the immunity of the stomach from self-digestion is the presence of an epithelial lining covered with mucus. It seems more probable that the separation of the acid of the gastric juice from the blood traversing the capillaries of the organ leaves the blood, and consequently also the tissues, in an hyperalkaline condition, which effectually shields them from its action; or, as Dr. Dalton maintains, it may be that the catalytic changes occurring in nutrition exclude those induced by the gastric juice. The other points that are successively treated of are wounds, herniæ, and displacements of the stomach and foreign bodies in its interior, gastritis, simple ulcer and cancer, dilatation and spontaneous perforation, and, lastly, various degenerations.

The subject of "fever," considering the size of the whole work, is given with remarkable succinctness. This is partly due to the circumstance that the literature and the history of the various doctrines that have been held in bygone times upon the nature of fever have been almost entirely omitted, but partly also to the circumstance that several of the points in the phenomena of fevers are discussed under other heads. M. Hirtz commences his essay with a brief description of the symptoms accompanying (1) the period of incubation, (2) that of invasion, (3) that of the fully developed affection, (4) of its termination, and, when this has been favourable, (5) of the stage of convalescence. He then proceeds to point out that the chief features characteristic of fevers consist in disturbance of (1) calorification, (2) of the circulation, (3) of the blood, (4) of the nervous system, (5) of the digestive system, and (6) of the secretions. The first of these, as may be supposed, is given at considerable length, and illustrated by observations taken in cases of pneumonia, scarlet fever, typhus, typhoid, acute rheumatism, and in intermittent fevers. By numerous tables M. Hirtz shows clinically that the variations of temperature exhibit a period of invasion and of augmentation, a stationary period and one of decline. The period of invasion precedes the rigor, and, according to his own researches, every subjective symptom. During the rigor an antagonism becomes apparent between the internal temperature and that of the surface, the difference amounting in the course of half an hour to as much as 10° C. As the shivering fit subsides, the temperature of the two parts tends to approximate; but the internal temperature often attains its maximum before the shivering has terminated. This is strikingly shown in the tracing of intermittent fever, and it is thus rendered evident that the shivering is not a deceptive sensation, but the perception of real cold. It is, however, only observed in those fevers that make their *début* by a severe access of fever, as in intermittent fever, pneumonia, pyæmia, variola, scarlet fever, yellow fever. In the milder forms of fever, in which the febrile temperature requires from three to six days to attain its maximum, the shivering is usually absent, and with it the strong divergence between the peripheric and the central temperature. It is, accordingly, not well marked in typhoid fever, measles, and exanthematous typhus. Here there are matutinal and vespertinal oscillation of such a nature that the evening exacerbation is exceeded by that of the following evening, and the remission of one morning by that of the subsequent morning, forming an ascending zig-zag line in the tracings known as "l'ascension en terrasse." The stationary period of the temperature varies in duration from an hour or less, as in the periodic fevers and in pyæmic exacerbations, to some days, as in pneumonia, scarlet fever, and typhus; or it may even last for a week or two, as in typhoid fever and acute rheumatism. It is to be observed that in all these cases there are morning and evening variations of remission and exacerbation, independently of temporary increase during pneumonic extension and the development of miliary or erysipelatous eruptions. In the event of a favourable issue, the matutinal remissions become more marked and complete, and the evening exacerbations less and shorter. The period of defervescence varies like that of the attack, in accordance with the nature and the violence of the disease. During convalescence the temperature is often below the normal, not exceeding 36° C.

The article "Face" is also a very satisfactory one, embracing a general account of its anatomy by A. Le Dentu, and of its pathology by H. Gintrac, who describes the various forms of neuralgia and paralysis, including the paralysis of the ocular muscles. In treating of paralysis of the third, whilst mentioning the principal routine methods of treatment, we do not find that Gintrac makes any allusion to Mr. Wharton Jones's suggestion of the employment of Calabar bean, though we have seen good effects result from this plan. M. Gintrac draws a distinction between migraine and facial neuralgia; the latter he defines as a disease accompanied by more or less pain, which is usually intermittent, returning periodically or irregularly, affecting one or more branches of the trifacial, without evidence of local inflammation, and without general symptoms. The bibliography of this article alone occupies nine closely-printed pages.

The Dublin Journal of Medical Science. Third Series, No. II. February, 1872. Dublin: Fannin and Co. London: Longmans and Co.

WE must apologise for making a somewhat sorry bull, but we know no shorter way of intimating the change that has taken place in regard to this publication than by saying that the "Dublin *Quarterly*" is now published *monthly!* The second number of the present series is before us, and it fully sustains the reputation of its quarterly predecessor—not the reputation of its palmiest days, perhaps, for some of the old numbers of the "Dublin Quarterly" were exceptionally good at a time when medical quarterlies were better than they are now. The February number contains a paper by Dr. Duffey on Rheumatic Orchitis as a sequel of Fever, with reviews of Wunderlich's Manual of Medical Thermometry, Dr. C. B. Radcliffe's Dynamics of Nerve and Muscle, works on Electricity, Reports of Societies, &c.

ABSTRACT OF

THE HUNTERIAN ORATION,

Delivered before the Hunterian Society, Feb. 17th, 1872,

BY DR. HUGHLINGS JACKSON.

EDUCATION in its widest sense was the subject selected by Dr. Jackson for the oration. In considering this subject, he said that it was impossible to preserve the artificially abrupt separation commonly made between mind and body. They were concerned as physiologists with physiological phenomena, and the introduction of psychological terms was misleading. For instance, to speak of the loss of memory for words in aphasia was as improper as to speak of loss of memory of movement in hemiplegia. In each the condition was due to a break of nervous structure. As physiologists they were concerned with co-ordinations of impressions and movements of different orders, and not with memory, will, and the like. All such co-ordinations were experimented on for them by disease, and they might hope ultimately to obtain a knowledge of all, though at present they could only work with profit at the simplest problems. But the inference was irresistible that the plan of structure and form of co-ordination was the same throughout. True scientific method consists, the speaker observed, in seeking fundamental likenesses in spite of superficial unlikenesses. To find fundamental likeness we should reduce the differing phenomena to their lowest terms.

In education, Dr. Jackson continued, there are two factors, one consisting of the inherited nervous arrangements, the other being the influence of external circumstances. Each is essential for the ultimate result. The inherited nervous arrangements differ widely, though only in degree. The lower, the more automatic, as of respiration, act early and on slight stimuli. The higher, as of speech, require elaborate education. But the result, compared with the possibility of development, is much more perfect in the former than in the latter. The ultimate possible respiratory development is quickly reached, that of the powers of speech never. Between higher and lower mental acts the same difference holds. The more automatic mental processes, as of emotional manifestations, are inherited in a state of development far more complete than are those of the higher mental acts. Hereditary influence can be traced far more in disposition than in mental ability. In those faculties which are the results of training a man may differ widely from his father, though he may closely resemble him in his habits of thinking.

The inherited structural differences of nervous systems involve differences in mind between individuals as vast as their physical dissimilarity. How this may be is suggested to us by the observations on the increasing asymmetry of the two halves of the brain as we pass upwards in the animal kingdom, and upwards in the degree of civilisation in the human race. The great aim of the education of the future should be to detect these inherited differences, and to give ability fair play, so that both in individuals and in society that which is highest in nature may become highest in life.

In the physical organism those parts which give stability are first developed; so in the great organism of the human race animal vigour was first developed by ages of fighting and physical hardship, and the growth of the intellect was slow. Thus a good physical basis was secured to bear the strain of a high civilisation. Here and there, perhaps, there has been a premature intellectual development—in the Chinese for instance. As in the individual mental development should not override physical energy, so society should consist chiefly of men of vigour, rather than of thinkers. The former do indeed take the lead as it is, in the government of nations as well as of vestries, and it is well that they should do so. A paternal government of philosophers might obtain order, but it would be at a sacrifice of freedom, and would hinder social development. And the instincts of the social organism are in favour of this. Homage is rendered to men of vigour far more than to thinkers; to those who strive after an end rather than those who conceive it; to those who invent rather than to those who discover the laws which lead to the invention.

Most care, then, is bestowed on the development in both the individual and social organism of the more general and more automatic processes. Many men of intellectual power fail for want of vigour, industry, and energy. Animals are born with mental development almost complete, but of a low kind of instinct. The development of the inferior races of mankind is earlier reached, but always lower than that of the superior. Precocity in the higher is usually indicative of more automatic qualities, skill, and cleverness, rather than varied ability and originality. Too early education, especially if rigid, often narrows the development of mind. Perhaps the most valuable part of a man's culture consists of the education he picks up for himself in life—an education, Dr. Jackson observed in conclusion, the means for which in our own profession are especially abundant.

PROFESSOR WILSON'S LECTURES ON DERMATOLOGY.

Delivered at the Royal College of Surgeons, February, 1872.

LECTURE II.

AFTER glancing at two remaining forms of erythema, the lecturer spoke of erysipelas. It is, he said, an erythema with all characters aggravated in intensity, both local and constitutional. The latter, however severe, usually quickly vanish on treatment which has been justly regarded as specific—twenty minims of tincture of perchloride of iron every two hours, preceded, of course, by an aperient and regulation of the functions of digestion and assimilation. Many cases are presumed to be erysipelas which are really nothing of the kind. Herpes frontalis and eczematous inflammation of the eyelids are especially so mistaken.

Urticaria, although semi-neurotic, is more allied to the erythemata than it is to the pure neuropathic affections, prurigo and pruritus. Its name is founded on its neuro-sensitive qualities; the accompanying hyperæmia indicates its neuro-motor nature. The bosses and wheals are probably due to muscular spasm. The College models of urticaria were then described. Its special symptoms vary much in degree. Usually due to irritating food, it quickly disappears on the removal of its cause; but in one form, U. perstans, the affection is persistent. Occasionally the centre of a boss subsides, forming a yellowish area surrounded by a circular wall; next the part of this wall disappears and the rest increases by serpiginous growth, forming an arc on the convex border, of which alone the redness is to be seen. Finally both subside, leaving sometimes a pearly stain, sometimes slight pigmentation, sometimes no trace whatever.

Comparing the eczemata and erythemata from a therapeutical point of view, it is seen that in the former the local affection demands more attention than in the latter. In the eczemata we have primarily to treat debility; in the erythemata, first to attend to the alimentary canal and then prescribe tonics. To this erysipelas might seem to present an exception, but the difference is more apparent than real, being mainly one of time. In chronic urticaria with neurotic phenomena small doses of arsenic may be found most useful. Absorbent powders are the chief local remedies for the erythemata. The itching of urticaria may require also sponging with hot water, the warm bath, and a lotion of emulsion of bitter almonds with borax, spirits of wine, and hydrocyanic acid.

The phlyctenous affections are represented at the College by models of pemphigus and herpes. In these the pathological state is trimorphic, the lesions of the skin being erythema, vesicle or bulla, and crust. It is strange that in some cases erythema subsides without leaving any mark of its presence, while in others it is followed by exfoliation of the cuticle, and in others by serous effusion beneath the epidermis, and even by suppuration and ulceration. The readiest explanation is that the difference is one of vital dynamics, of degrees of vital and nerve force. Pemphigus iris offers an instance of the transition from the erythemata. It resembles in general character erythema iris, with the addition of vesication. The central bulla may be surrounded by one or several vesicated rings. It is usually local, limited to the hands and feet, and associated with debility and with enteric disturbance.

In one case, of which a drawing was shown, the central bulla was surrounded by seven red rings, separated by paler circles; and round another spot in the same case were nine circles of different tints. The affection is often miscalled herpes iris. One of the specimens exhibited had been named by the French hydroa, from its bullous centre.

Pemphigus vulgaris is usually local, but occasionally, in cachexia and in severe cases, it is general. A model was exhibited from a servant girl who had died on the ninth day from the outset of an attack. The eruption was general, but most abundant on the extremities, the average size of the bullæ being that of an almond. It had occurred after the use of an ointment containing turpentine, which she had employed for a pruritus. At first there was little evidence of any general malnutrition, but she became delirious, and afterwards comatose. At the post-mortem examination the only morbid appearance was congestion of the mucous membrane of the small intestine. Pemphigus is always a grave disease, the occurrence of the blebs indicating a low vitality. The fluid contained in them is at first clear blood-serum, but it afterwards becomes opalescent and yellow from the development of pus-globules. Occasionally it is coloured by blood, either from accidental friction or hæmatolysis, which betokens more or less advanced cachexia. Usually the retrogression of the bleb is simple, with or without the exudation of inflammatory products; but sometimes superficial gangrene occurs, and is succeeded by ulceration.

In conclusion, the lecturer glanced at the misapplication of certain dermatological terms, especially "lichen" and "herpes." The former, he said, which comes from λείχειν —*lingere*, to lick,—refers to something adhering to the surface, as the tongue to a glass plate which it is licking. It is correctly used by botanists, but there is nothing more opposed to the genius of the word than the group of pimples to which it is applied by the dermatologist. Again, herpes is derived from *ἕρπειν—serpere*,—a word which has given us the adjective "serpiginous." Its character of creeping onwards by the circumference to the neighbouring skin is one which the eruption of herpes entirely lacks.

Foreign Gleanings.

VITAL FORCE.

Is there exclusively such a force? Modern tendencies are not in favour of an affirmative answer; there are, however, a good many believers in this occult force. At the Academy of Medicine of Brussels a warm discussion has lately taken place on this subject, and the existence of a vital force found a talented supporter in M. d'Omalius d'Halloy. Even the political papers teemed with letters upon this controversy, and a young professor has published a pamphlet from which we quote the following passage, taken from *L'Union Méd.*:—"We attribute the autonomic activity of anatomical elements to a force which we call vital, without venturing to prejudge as to its nature, and without being able, scientifically, to speak of its origin and its ultimate fate. By its effects, however, we become aware of its existence and characters; and we perceive that it is independent of the soul and different from the physico-chemical force." No doubt much might be said in opposition to this; but something is gained by not bowing low to the physico-chemical despotism of the age. Who will have the courage to bring the matter before the Medical and Chirurgical Society?

PURE CHLOROFORM.

At a late meeting of the Academy of Medicine of Paris, M. Personne, a distinguished pharmacien, referred to alterations taking place with time in chloroform; these alterations he attributed to an impurity which he conceived to be chloric oxycarbonic ether becoming decomposed by the influence of light. To prove the truth of this assertion M. Personne showed a sample of chloroform which he had himself carefully purified, and which, exposed for the last two years to the action of light, has remained intact, and does not emit acid vapours. The author thinks that the presence of the chloric oxycarbonic ether in chloroform of commerce is due to the employment of impure alcohol called phlegm. Such things did not happen when chemists made their own chloroform with absolute alcohol according to Soubeiran's process.

VACCINATION IN CHINA.

M. Martin, Physician to the French Legation at Pekin, is publishing a series of papers in the *Gaz. Hebd.* of Paris on Chinese medicine. The facts and remarks are very interesting, though many of the former are already well known in this country. As to vaccination, M. Martin states that its use is pretty general in the seaports, although it penetrates with difficulty into the interior. The mandarins, however, who perceive the benefits of Jenner's discovery, favour the spread of vaccination; and they succeed by persuading the people that it has been imported by Mussulmans or discovered by the emperor. The latter assertion is all-sufficient. At Pekin, Dr. Dudgeon has been very successful, so much so that from 2000 to 3000 children are annually vaccinated.

AN OPHTHALMOSCOPE FOR THE SIMULTANEOUS USE OF TWO PERSONS.

At a late meeting of the Academy of Medicine of Paris, M. Gavarret exhibited an ophthalmoscope of this kind, constructed jointly by himself and M. Sichel, the son of the late distinguished ophthalmologist of Paris. The instrument may be of use when teacher and pupil wish to examine the same patient together, or when the eye is to be investigated in consultation. It is constructed on the principle of the reflection of luminous rays on the hypothenusian surface of rectangular prisms. Each observer looks through a different aperture of a box furnished with a mirror and an internal prism; and M. Gavarret states that, from the experiments made by himself and M. Sichel, the reflected image is the most distinct.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 24, 1872.

THE approaching meeting of the General Medical Council is likely to be one of the most important sessions of that body. The principal business will be the consideration of the various schemes for the formation of Conjoint Boards for the respective divisions of the United Kingdom. If the different universities and corporations of these divisions, sinking or subordinating their individual interests, can agree upon a scheme that shall give three examining boards, so constituted as to be likely to examine satisfactorily in all branches of medicine, including surgery, midwifery, and public health, they will have done much to induce even the opponents of such schemes to concede that the existing bodies ought at least to have the chance of trying to act in combination before the duty of examining students for a licence to practise is committed to other and more compact boards. If they cannot agree, then the demonstration will be perfect that for the broad and vital public purpose of a complete examination, including all that is essential to a medical practitioner, the present bodies are unfitted. Of one thing the various bodies may be assured—that the present state of matters cannot be continued. The anomaly of a medical student having to go to two or three different bodies for a complete diploma, and of being able to register on the strength of an incomplete qualification, must cease. Such arrangements are antiquated. They may be allowed to remain till the *Alabama* claims are adjusted and the great privilege of secret voting is assured to the British elector. But the abolition of them is only a matter of time. And the interested bodies have nothing but credit to gain by viewing the question from the public standpoint, and at some sacrifice agreeing to a conjoint scheme. We shall not too minutely forecast the probable disclosures of the forthcoming meeting as to the feeling of the different corporations and universities on this question. Our readers know that in England a scheme is agreed on. We believe that the same is true of Ireland. But our Scotch friends, always greater at debate than at decision, have not yet been able to agree among themselves.

We publish in another part of THE LANCET a Memorial to the General Medical Council from certain medical men, pointing out that such conjoint schemes as are contemplated will be cumbrous and costly; that they will involve hardship to the student, and will not give assurance to the public of efficiency in the examinations. These gentlemen—amongst whom is Dr. W. T. GAIRDNER—think that the great thing to be aimed at is to watch and stimulate the existing examining boards through a systematic inspection, conducted under the auspices either of the Government or the Medical Council. It will be remembered that it was a prominent feature of THE LANCET Bill to require the appointment of independent Inspectors by the Medical Council, who should visit the different licensing and other boards in rotation. And this suggestion of the Memorial only anticipates us in urging on the Council the wisdom of having the examinations visited by perfectly independent Inspectors—a course suggested by Clause 18 of the Medical Act. Our own often expressed views of conjoint schemes do not differ materially from those of the memorialists; but, in deference to the earnest attempts that are being made to frame them, we think it but fair to suspend judgment till the whole of the result of these attempts is before the Council.

WE do not propose this week to discuss Mr. STANSFELD'S project of sanitary legislation at all, for until the full text of the Bill is published there can be no satisfactory basis for comment and criticism. We have our own ideas as to the general tendency of the new arrangements, so far as Mr. STANSFELD'S speech shadowed them forth; but it would clearly be premature to offer any opinion till the whole plan is before us. Yet we must say a few words, without further loss of time, as to the requisites which are, in our opinion, indispensable even to a commencement of effective sanitary reform.

We believe that a large section of the public, and nearly all the statesmen who have to deal with sanitary questions, greatly misconstrue the intention and feeling of the medical profession when it demands a voice in the settlement of sanitary legislation and in the practical working of any improved system that may be introduced. They think, to use plain language, that our eagerness for these objects is compounded of two feelings—a wish to obtain well-paid and honourable employment for a certain number of medical men, and an enthusiasm for making scientific experiments; and they believe that we are prepared to indulge both these inclinations pretty much without reference to the cost that will be inflicted on the public. Medical advice, they say, is always expensive, but the medical man cares little about that.

Now, this is a very erroneous view of the matter. We are not so hypocritical as to deny that we should rejoice in the incidental result of the success of plans which would bring fair pay and interesting employment to a certain number of our colleagues, or that we should feel a keen pleasure in the opening up of opportunities for the discovery of new improvements in sanitary science; but we would most expressly repudiate the charge of indifference to the pecuniary interests of ratepayers. Our whole contention is that the pecuniary as well as the vital interests of the nation would be well served by a reconstruction of sanitary machinery which would place medical men in a situation to strike with real effect at the beginnings of disease, so as to prevent its disastrous spread. But we go further than this, and admit, with perfect frankness, that even in so good and necessary a work, for which medical men alone possess the requisite knowledge, they by no means ought to be allowed to advise the expenditure of money without the most constant and vigilant checks being imposed upon them. This bears on any scheme of sanitary legislation that can be brought forward at the present time in the following manner:—It is impossible for the medical

profession to give its sanction to any scheme that is not at least based on the principle that all information concerning the sanitary condition of the individual districts of the country must pass to the Chief of the Local Government Board *through the hands of skilled medical experts*. We say that unless this be done there can be no uniform and truly efficient action throughout the country against preventable disease; for that so-called "facts" as to the sanitary wants of the districts which have not received this kind of critical investigation will be more misleading than absolute ignorance. We assert, therefore, that up to this point there can be no question as to cost at all; since to spare any expenditure that may be needed for the purpose just named would be exactly the same thing as to starve a business of the capital which is absolutely necessary to its successful working; and that of all businesses, sanitary improvement is that in which it is most futile, and ultimately ruinous, to engage with insufficient means. According to this view it is obvious that whatever arrangements may be imposed on the local authorities—concentration of districts, compulsory appointment of district medical officers, and so forth,—the whole scheme would remain fruitless unless there were interposed between the local officers and the central authority either divisional medical officers of health of high *scientific* acquirements and critical faculty, or else travelling inspectors from the central office possessing similar qualifications; in either case, men who will be scientifically and socially independent of the arguments and the influence of vestrymen and guardians.

All this, however, does not in the least blind us to the fact that a close watch ought to be kept on expenditure, and that in the machinery required to work the ponderous business of poor relief there must be included a considerable *legal* element of inspection. All facts which relate to the relief of mere poverty ought clearly to be subjected to such criticism; and even with regard to the care of and expenditure upon the sick, it is not improbable that, at any rate in the capacity of auditors of accounts, the mere business qualifications of the legal inspector may be useful, especially with a view to check local extravagance which presented any appearance of being tainted with jobbery. But when we are told that we cannot have a "parallel inspectorate," and that consequently the medical element must be sparsely employed, and the bulk of the inspection of ordinary sanitary matters confided to such gentlemen as those whose shortcomings in workhouse inspection have produced such a host of scandals, then we protest that the statement is consciously insincere. Three-fourths, or rather five-sixths, of the inspectorial staff would have to be medical men, in proportion to the relative amounts of purely medical and of other matters which will have to be attended to; and the amount of work suitable to the capacity of a barrister of the third or fourth rank (such as the gentlemen who have been employed under the Poor-law Board) is so moderate that a very small staff of persons, provided they were really kept up to their work, could easily perform it. But if there were ever so much difficulty in employing both medical and non-medical inspectors, it must yet be perfectly evident that medical facts, to be usefully acted upon by the chief of the department, must in every case have been investigated and sifted by scientific critics of high capacity, and that this investigation and sifting must not merely be applied to positive abuses disclosed by the local sanitary officers, but must extend to a close and periodical examination to determine whether such abuses have not simply been overlooked.

In fine, the provision or non-provision of such a machinery as we have indicated must be taken as a crucial test of Mr. STANSFELD'S sincerity and capacity in the matter of sanitary reform. He has an unequalled opportunity before him in the roused state of public feeling consequent on the Prince's illness. If he fail to take advantage of it, he will connect his name with as deep and lasting a stigma of demerit as any minister that this country has seen.

THE paper read by Dr. BROADBENT at the Royal Medical and Chirurgical Society on Tuesday evening, the 13th inst., "On the Mechanism of Thought," deserves more than a passing notice, since it not only furnishes highly valuable suggestions in regard to the development of our knowledge of the physical conditions accompanying the various mental processes, but touches many points of great pathological interest. No one can have studied the works of the numerous writers who have attempted to give an exposition of the nature of mental phenomena without feeling that their weak point is the almost entire ignorance they display of the structure of the parts the functions of which they discuss at such great length. The great majority reason out from their inner consciousness the nature of sensations, ideas, emotions, the moral sense, and the like, without the faintest idea of the structure of a nerve or of the difference between a fibre and a cell. Hence the intolerable dryness and the unsatisfactory nature of the conclusions at which they arrive. The researches of the last few years, however, undertaken by many foreign and English workers, among whom Drs. TROUSSEAU, BROCA, HUGHLINGS JACKSON, OGLE, and BASTIAN occupy a distinguished position, have thrown a flood of light upon the subject; and though much remains to be explained and understood, we seem to have acquired certain facts that may serve as a substantial foundation for the extension of our knowledge in this direction.

In the paper to which we refer, Dr. BROADBENT advances a theory of the mechanism of thought, founded partly on his own researches into the structure of the brain, and partly on the phenomena observed in cases of so-called aphasia; and his views may thus be briefly stated:—In regard to structure, he believes his dissections demonstrate that the radiating fibres issuing from the central ganglia are chiefly if not exclusively distributed to the convolutions forming the margin of the great longitudinal fissure and those forming the margin of the fissure of Sylvius, and the parts adjacent both in front and behind; that the fibres of the corpus callosum are distributed to these same convolutions; that there are convolutions, as those on the under-surface of the temporo-sphenoid and orbital lobes, island of Reil, and others on the convex surface, which have no direct connexion with either crus, central ganglia, or corpus callosum; and, lastly, that there are fibres connecting

different parts of the cortical grey substance. His theory in regard to the functional activity of these parts is based on that suggested by Dr. BASTIAN, and may thus be shortly given:—Ideas or thoughts—the act of thinking—are the function of the highest centres, occupying those parts of the cerebral hemispheres which are thus withdrawn from the outer world. When such thoughts or ideas are required to be translated into language, impulses are transmitted through communicating medullary fibres to the third left frontal convolution, where they are formulated into speech, the words being selected that are adapted for the expression of the idea or phrase. But for the articulation of any given word many muscular groups must be called into play—as those of the chest, larynx, tongue, and lips. The co-ordination of muscles for this purpose is effected by the corpus striatum, in which certain groups of cells representing certain sounds or words exist. The business of the third left frontal convolution is to call into play the right cell groups in the corpus striatum, which shall transmit to the nerve nuclei in the medulla and cord the impulses requisite for the utterance of the words that it has itself selected as most appropriate for the expression of the idea existing in the supreme centres.

It is obvious that this theory enables an explanation to be given of many pathological phenomena. Dr. BROADBENT, following Dr. BASTIAN, holds that there may be either paralysis or merely a want of co-ordinating power in each of these centres. In the case of the supreme centres, for instance, the lesion may be so serious as to lead to utter loss of the memory of ideas and of words as intellectual symbols, and the patient is then said to be amnesic; or there may be only a want of co-ordinating power—a failure in the capability of selecting the words or phrases required to express a given idea. But the supreme centres may be undisturbed and free from disease, as shown by the retention of memory and the power of expressing ideas by some other mode, as by writing. And yet there may be loss or impairment of speech. In such case the third left frontal convolution is diseased. And here, again, the lesion may be so severe as to abolish its function of selecting words or phrases appropriate to the idea desired to be expressed, and thus produce aphasia; or its co-ordinating powers may alone be affected, and the impulses it sends down to the corpus striatum may be directed through wrong channels, exciting wrong cell groups, and giving rise to the use of inappropriate words. In cases where the corpus striatum or the motor ganglia in the medulla are affected aphasia is not present, but there is impairment of articulation; and thus in these several instances we obtain a key to what otherwise are very puzzling groups of symptoms. We have not space to do more than refer to Dr. BROADBENT'S suggestion of the storing up of force in certain cells, but cordially recommend the whole paper (which we hope to see in the Transactions) to our readers for perusal.

THE College of Physicians has deputed Dr. Burrows to bring the scheme for a Conjoint Examining Board for England before the Medical Council with a view to obtain its sanction to amalgamation under Clause 19 of the Medical Act.

Medical Annotations.

"Ne quid nimis."

THE EXAMINERSHIP AT THE COLLEGE OF SURGEONS.

WE regret to have learnt that Mr. Campbell De Morgan has taken steps to have his name withdrawn from the list of candidates for the examinership at the College of Surgeons. Mr. De Morgan was doubtless guided by those independent and high-minded feelings which have always influenced him in his action towards the College of Surgeons. He has always objected to the examinerships in Anatomy, and more especially in Physiology, being held by surgeons who have long ceased to teach, or in some cases had never taught, those subjects, and he therefore declined to be a candidate for the examinership until the examiners in Anatomy and Physiology are separated from those in Surgery. Whilst applauding Mr. De Morgan's view as to the necessity for instituting separate classes of examiners—a necessity long since recognised by a resolution of the Council never yet acted upon,—we cannot but regret that gentleman's withdrawal, since he has thereby rendered the election of a councillor to the examinership almost a matter of course. Mr. Birkett will no doubt make an excellent examiner of the ordinary type, but we had hoped to have a novelty in an examiner elected from the Fellows not on the Council, who might have seconded Mr. Savory in his endeavours to make the Fellowship and Membership examinations somewhat more of real tests of professional knowledge and ability than they are at present, and thus have improved the teaching, both theoretical and practical, of the schools.

THE EDINBURGH UNIVERSITY CLUB.

THE Edinburgh University Club held its annual meeting on Thursday, the 15th inst., at St. James's Hall, under the most happy and satisfactory auspices. The members of the Club—307 in all—number more by nineteen than at the same time last year, and the Club is growingly felt to be not only a pleasant institution but a powerful mode of uniting Edinburgh men in London and the provinces. A deputation was appointed, consisting of Dr. Halley, Dr. Dyce Duckworth, and Mr. Davy, to represent the Club at the Christison Banquet, and to present an address, beautifully engrossed on vellum, to Sir Robert. Five guineas were voted to the University Endowment Association. The dinner which followed the meeting was attended by a very large number of graduates. Dr. Lyon Playfair presided, and was ably supported by many well-known graduates. Amongst others we may mention Sir Henry Holland, Dr. C. J. B. Williams, Sir Charles Nicholson, Dr. Alfred Hall of Brighton, &c. The hero of the night was Sir Henry Holland, of whom the Edinburgh University is naturally proud, and who took his degree in the year 1811. Sir Henry had been made an honorary member of the Club in the room of Sir Roderick Murchison, and his health was proposed by the president. In reply to the toast he spoke very feelingly of the advantages of his early training in Edinburgh, and expressed his belief that similar advantages, in a conspicuous degree, were still enjoyed by the *alumni* of the university, who, according to the President, will number before the summer session is closed about 1900 students of all Faculties. On Dr. Playfair leaving the chair it was taken by Sir Charles Nicholson, Speaker of the House of Assembly, Sydney, and Chancellor of the University of Sydney. The handsome loving cup went socially round, and all the elements of a congenial festival abounded,

from haggis up to "Auld Lang Syne." Many guests were present, including Mr. Savory and Mr. Brudenell Carter. The latter gentleman replied in graceful terms to the toast of the Medical Press, proposed by Sir Charles Nicholson.

PROFESSOR OWEN ON LONGEVITY.

To *Fraser's Magazine* for the present month Professor Owen contributes a paper on "Longevity," in reply to the Bishop of Ely's note on Genesis v.: "As to the extreme longevity of the patriarchs, it is observable that some eminent physiologists have thought this not impossible." The bishop's authority turns out to be Buffon, whose pretensions to be a physiologist, or even an exact observer or scientific thinker, Professor Owen exposes with trenchant criticism. Demonstrating, from the period at which the epiphyses of the long bones coalesce with the diaphyses, and also from the laws of tooth-supply, that the life of a species has an allotted length, the professor proves that human beings existing sixteen centuries before the date of the Noachian flood, and about the time of the Hebrew creation of the world, were subject to the same osseous and dental conditions which still prevail in and characterise the human race. "Physiology," he says, "can affirm no other than that bipeds enjoying (?) 800 years of life could not belong to our species. That they could is impossible in every sense save the theological one—namely, that which involves a continuous succession of miracles. Nothing short of such prolonged suspension of the laws of nature can make the statements in Genesis v. square with the facts of physiology. If the Bishop of Ely will propound the question to the professors of physiology in Cambridge or Oxford, or in any other university or college, I confidently aver that he will receive the same answer in the main." Professor Owen adds that the conclusions of Professor Flourens, that, in the absence of disease and under all conditions favourable to health and life, man might survive as long after the procreative period (ending say at 70 in the male) as he had lived to acquire maturity and completion of ossification (say 30 years), are not unphysiological. At the same time he shows that no centenarian has ever reached 105 years, and that the legends of the longevity of Henry Jenkins, the Countess of Desmond, and Old Parr are easily explained by false or imperfect registration. As to persons getting a third set of teeth, he tells a graphic story of an old Irish peasant woman who had persuaded herself and her clergyman that she had been so favoured. But her "new tooth" resolved itself on examination into this:—"At fifty the gum had closed over the fang of the decayed and broken-off crown. The absorption which reduces the vertical extent of the jaw, by removing the alveolar part, touched not the retained fang, and spared in part its particular socket, when the tooth-stump protruded through the subsiding gum." The paper, which is one of the most acute and learned (even in classical reference) that we have lately seen, concludes with a noble burst of true piety, such as can only come from a devout and self-denying investigator into the physical records of creation.

THE RICHMOND HOSPITAL.

WE regret to notice a considerable want of harmony in the Richmond Hospital, chiefly owing to a resolution on the part of the committee to add to the four officers of the medical staff three others to attend to the out-patients. This resolution alters what is called "the establishment"; and it so happens that one of the medical officers is also honorary secretary to the hospital, and has been such from the commencement. In this anomalous position the honorary secretary, Dr. Archer Warwick, seems to have had much of his own way in constructing and conducting "the establishment" till he has acquired for it an affection like that of Jonah for his gourd. The proposal to depart from Rule 33, and bring other medical men into the "establishment," affects Dr. Warwick almost as keenly as if it were a proposal to abolish the whole institution; and he has resigned the secretariat in a letter which is not conceived in the best taste. It sets forth his most arduous labours in the cause of the charity, and suggests *how little* others are willing to do for it. We feel persuaded that Dr. Warwick will see on reflection that this letter betrays more solicitude for "the establishment" than for the charity. We confess that, viewed abstractedly, four medical officers seem to us sufficient for an infirmary with but 15 beds and 120 out-patients in the week, especially as there is in Richmond an excellent dispensary doing the usual out-door work of a hospital. But the majority of the staff and governors think otherwise, and Dr. Warwick should allow his colleagues to differ from him without drawing invidious comparisons between their interest in the charity and his own. We congratulate Dr. Warwick on his resignation of the secretariat. This office is unsuitable to a medical man, and to one of the medical staff especially so, for reasons which are too obvious to require mention, but which find an illustration in the unseemly difference at the Richmond Hospital.

OUT-PATIENT REFORM AND PROVIDENT DISPENSARIES.

THE Charity Organisation Society deserves great credit for the promptitude with which it has endeavoured to grapple with the gigantic evil of indiscriminate medical relief. The Society has endorsed the result of our own inquiries, and affirms that there is no class of charities which is doing so much to pauperise the population, to undermine their independence and self-respect, and to discourage habits of providence, as the medical. The evil is aggravated by the present method of appealing for subscriptions by advertising the numbers who are admitted week by week or year by year, and the Society calls the attention of the public to the fact, that the statements of this kind form no proper index to the amount of good accomplished, for the highest good is to discriminate the cases, to weed out those that are unsuitable, and to give relief to that comparatively small number to whom, being fit recipients, advice and medicine are an unmixed boon. This is the peculiar function of the Society, and it is to be hoped that both in London and the provinces it will so extend its inquiries that imposture may be diminished.

And this leads to the second part of the remedy proposed. The Society points out that whilst in London there is a Free Dispensary to every 44,000 persons, there is only one Provident Dispensary to 300,000; indeed, there are about 80 free institutions to which the artisan or labourer can turn at any moment, and which are bidding against each other for his custom. The Society has therefore commenced to draw the attention of the governors of these institutions to the evil they are helping to support, and they are requested to convert their free dispensaries to the provident principle. It is hoped that the branch committees of the Society will do this in their respective districts, and we are of opinion that they will certainly, in the end, succeed. There is much prejudice to be overcome, but there are already many amongst the truly benevolent who are ready to assist them in their efforts.

There is a danger to which attention should be called. The Society has drawn up an excellent code of rules for the management of provident dispensaries, and care should be

taken that those rules are scrupulously observed when the name of the Society is used. We had occasion to complain of the rates of payment proposed at Fulham, the new dispensary being supposed to be established under the auspices of the Society. On comparing those payments with the draft rules, we find them considerably less than was suggested by the medical committee. Thus for London the payment for an adult is 6d. per month, whereas at Fulham it is only 4d.; the payment in London for a family is 10d. a month for man and wife and 2d. per month for children under fourteen years of age, whereas the Fulham Dispensary proposes only 8d. per month for the whole family, however numerous. We hope, therefore, that the Charity Organisation Society will use its influence in favour of its own proposals; for nothing would be more unfortunate than to incur the hostility of medical men by appearing to support an inadequate scale of payment.

PROFESSOR HUMPHRY ON SLEEP.

ON Friday, the 9th inst., Professor Humphry gave at the Royal Institution an interesting lecture on Sleep. The lecturer, in the first place, glanced at the various conditions favouring or producing sleep, and insisted strongly upon active use of the mind during waking hours, and short hours of repose as essential for the soundness of sleep. Work done in sleep, to be done well, should, like other work, be done vigorously. We ought to sleep energetically, and not in a languid, dawdling manner. In answer to the question "How much sleep is needed?" the lecturer quoted the old saying, "six hours for a man, seven for a woman, eight for a fool"; observing, however, that, whatever eight might be for a fool, six was rather short for a man. At each end of life more time is spent in sleep. The sound slumber of the child is proverbial; in the second childhood, which contrasts with the first rather than resembles it, sleep is far less sound, though almost as prolonged.

The process of falling asleep cannot be observed in oneself. Usually only the first loss of voluntary power, that over the delicate muscle raising the eyelids, may be noticed before unconsciousness supervenes. But the transition is not always so rapid. Sometimes intermediate conditions of greater or less duration may be observed, periods of cerebral excitement, analogous to that which is so well marked in most forms of artificially-induced sleep. These periods of excitement may be brief, but often are so full of mental changes as to seem indefinitely prolonged. As this condition, on the one hand, is scarcely distinguishable from the waking state, so, on the other, it passes insensibly into the dream, which is a slight exaggeration of it, as sleep deepens and the mental operations escape control. Some phenomena of dreams were next alluded to. Many of these may be explained by remembering the difference between the knowledge stored in the brain and the amount subject to voluntary recall. The former is often great, out of all proportion to the latter, and during the dreaming state, when control is removed, unrecognised knowledge may start up in the mind in a way that seems inexplicable. That high control over the mental acquisitions may be regarded as the culminating effort of cerebral function. The results of experiments on animals and of observation on man seem to point to unity or combination of action of the several parts of the cerebral hemispheres, rather than individual or independent operation. The attempt to isolate mental acts seems hopeless. Both on physical and metaphysical grounds all seem to be associated with the same changes, chemical, undulatory, or both, pervading the whole mass, and the differences depend on kind of change, rather than on the particular region in which they occur. The lowering of control as sleep comes on is due to lowering of function in the whole, and the various phenomena of dreams are due to disorderly action of the whole mind and whole brain.

THE ROYAL MEDICAL SOCIETY OF EDINBURGH.

ON Thursday, the 15th inst., the Royal Medical Society held its annual dinner. The attendance was numerous, the professoriate of the University and the extra-academical lecturers being largely represented. The chairman, Mr. Edward Willis May, in giving the toast of the evening, dwelt on the advantages which the Royal Medical Society, since its foundation in 1734, had afforded the students of the Edinburgh school. As a *campus* for discussion, it had rendered invaluable service, not only in familiarising the undergraduate mind with the different aspects of contemporary problems in medicine, but in promoting that ease of expression, and that respect for one's neighbour's opinions, which only a first-class debating society can do. Dr. Andrew Wood, in replying to the toast of the "General Medical Council," let fly his customary bolt at "those critics in the medical journals who are, above all men, so well calculated to legislate for the medical profession"; and, as usual, credited the Council with having achieved improvements in the literary and scientific status of practitioners which are in great measure due to the general advance of education, and which, moreover, could have been even more effectively brought about by a different legislative body. We are grateful, however, to the Doctor that, in his genial special pleading, he spared us all reference to the gift-bearing Danai, the obtuse breasts of the Carthaginians, or his stern impartiality towards Trojan and Tyrian. Professor Lister came after him, and, while avowing himself a steady opponent of the medical education of women, animadverted severely on the "riot which, within the last few days, had assumed proportions which must bring shame and blushing to the face of everyone connected with the University." To that disgraceful exhibition the dinner of the Royal Medical Society, with its manifestations of young enthusiasm and generous aspiration, must be a reassuring offset. May the spirit which animates its promoters accelerate the return of the Edinburgh undergraduate to his old character for chivalry and honour.

MR. GILBEY ON DRUNKENNESS.

AT this juncture, when all good men are anxious to abate the vice of drunkenness, Mr. Gilbey is entitled to be heard. He has done much to improve the national taste in this matter. He thinks that the evils still remaining are principally due to an unequal distribution of alcohol, and to an unwise system of licensing. His philosophy is the very opposite of that of the Permissive Bill party. He looks for temperance chiefly as a result of a plentiful supply of cheap drink. Discretion, he says, follows plenty. He would tax all businesses equally, and the publicans just like others—say, with a licence costing from 5*s.* to £5, according to rental. He would restrict hours, especially for drinking on the premises. We have repeatedly expressed our opinion that the great evil is "drinking on the premises," and we are glad to agree with Mr. Gilbey in thinking that this point chiefly needs regulation. Surely the supply to a man for drinking on the premises might be limited, and the supply of drink to a drunken man might be made criminal. Mr. Gilbey thinks that by cheapening the licences licensed victuallers would, in consequence of an extended competition, be compelled to aim more at securing family trade than, as at present, the custom of only one member of a family. Mr. Gilbey's great point, however, is that, in con-

sequence of the cheapening and more equal distribution of wines, while the consumption of them has increased, intemperance from them has diminished. Concerning spirits, he shows that in 1831–40, when the population was 24,000,000, we consumed 6,439,519 gallons more spirit than from 1861–70, when it was 30,000,000. To make men superior to the abuse of drink, he would make it cheap and easy of procurement. The failure of the free trade experiment in Liverpool he attributes to the fact that it applied only to consumption "on the premises." Whether the cheapening of beer would lead to a reduction of intemperance from it is a question that can only be determined by experience. The case of light wines is scarcely a convincing one. They have never been a cause of much drunkenness in this country, and the cheapening of them was a boon chiefly to the more enlightened section of society, who wished for something lighter to drink than spirits or the stronger wines. Undoubtedly, however, it would be better for a working man to distribute the beer he buys over the week, and to share it with his wife and grown-up children, than to drink it all on a Saturday night in social selfishness; and this end should be favoured in legislation. But Mr. Gilbey seems to us to expect too much from a mere cheapening of intoxicating drinks, and to make too light of the need for education as a remedy.

THE PRINCE OF WALES.

THE readers of the daily papers will have noticed that Sir James Paget was, early in the week, in attendance at Osborne, and we have reason to believe that the visit was in connexion with a recurrence of a local affection which it will be remembered gave the Prince of Wales some trouble during his convalescence. As it would be manifestly most injudicious for His Royal Highness to run any risk by undergoing the fatigue necessarily incident to a State procession and ceremony, unless his health should be so completely restored as to relieve the minds of his attendants from all anxiety on his behalf, the public must be prepared to bear with equanimity an absence which, should it be necessarily enforced, will, we feel certain, be as irksome to the Prince and his family as it can be to the thousands who are anxious to feast their eyes once more on the heir to Eng'and's throne.

DUBLIN OBSTETRICAL SOCIETY.

AT a meeting of this Society, held in the College of Physicians, Dr. Johnston, the present master of the Rotundo Lying-in Hospital, read an excellent report on that institution. The Dublin school of midwifery has always been celebrated, and the Rotundo Hospital is the largest of the kind in Great Britain. During the year ending November 5th, 1871, altogether 5573 cases received treatment in connexion with this charity, and 1161 intern labour cases were admitted. Epidemic diseases, such as typhus and typhoid fever, erysipelas, scarlatina, and, latterly, small-pox, had prevailed in Dublin during the year, and patients had been admitted, not only from the localities, but from the very houses where these diseases existed, and, in some cases, were even themselves suffering from one or other of them at the time of their admission; but Dr. Johnston is able to declare that in no instance did the malady extend beyond the affected individual, showing, in his opinion, that to patients a large maternity can be fully as safe as allowing them to be confined in their own homes, and that it does not favour the engendering of disease or the spread of contagion. Nearly half the 1161 cases admitted were primiparæ, and a large proportion consisted of unfortunate unmarried women. The mortality was large, amounting to 33; but Dr. Johnston, after very minutely analysing all the circumstances of the deaths, holds that they could not be in any way attributed to the air or atmosphere of the hospital, but that they would have taken place if the women had been confined in their own homes or in cottage hospitals. The whole of the paper, with the report of the discussion that followed its reading, is published in the February number of the *Dublin Journal of Medical Science*. We do not stay to discuss any of the points raised by Dr. Johnston, but may say that his report is well worth reading in connexion with the subject of hospitalism and lying-in institutions. Dr. Johnston takes a very different view of these institutions from that of Miss Nightingale in her recently published notes.

PATHOLOGICAL SOCIETY.

AT the meeting on Tuesday last the President announced that the Council had recommended that occasionally a portion of an evening should be set aside for the discussion of abstract questions. The amount of information scattered through the volumes of the Society's Transactions was exceedingly large, and the time had arrived when the Society might well devote some part of its time to the deduction of generalisations from the numbers of individual specimens which had been brought before it. This is a good resolve on the part of the Council, and we shall hope to be able to report good discussions on some of the more vexed pathological questions; but we hope the speakers will not be so diffuse as they were last Monday.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

THE successful effort of the working men of Birmingham to aid the funds of the Queen's Hospital has received a graceful and gratifying acknowledgment from the committee of that institution. At a meeting of the Executive Committee of the Working Men's Fund on the 17th inst., it was announced by the chairman, Mr. Gamgee, that the committee of the hospital were prepared to recommend to the ensuing annual meeting of governors that, in recognition of the services rendered to the hospital by, and in consequence of the exertions of, the Working Men's Committee, twenty nominees of that Committee should be elected life governors of the charity. It was also proposed to erect a tablet in the new building to commemorate the labours of the working men. The Committee of the Queen's Hospital further suggested that the Working Men's Committee should be made a permanent institution to aid the various medical charities of Birmingham.

We are glad to notice this successful issue of the effort made by the labouring class, under Mr. Gamgee's able direction, to assist the local medical charities; and we wish the "sons of labour" of other great industrial centres would follow the example set them in Birmingham. The acknowledgment of these labours by the governors of the Queen's Hospital has taken a most gratifying form, and good cannot fail to come out of such a bond of union.

OVER-POPULATION AND LARGE FAMILIES.

THIS has been the text on which a particular school of political economists and certain members of the "Dialectical Society" have never been tired of preaching. We suppose no one regarding the amount of poverty, misery, and crime to be met with in every large town could shut his eyes to the fact that much of it has sprung from the overcrowded condition of our great industrial centres, and the terrible struggle for existence that obtains among the poorer classes in our midst; but before having recourse to the expedients which are vaguely hinted at rather than

openly avowed by those who regard marriage and the limitation of the population as "the whole duty of man," it would be well to ask whether existing evils cannot be overcome by some scheme for the emigration of labourers into regions where the market-places are less crowded with those waiting to be hired. Be this as it may, however, we would venture to direct the attention of those who hold the tenets and advocate the practices of some members of the Dialectical Society to an admirable clinical lecture by Dr. William Goodell, of the University of Pennsylvania, published in the *Philadelphia Medical Times* of the 1st inst. The lecturer dwells in very forcible language on the irreparable moral and physical degradation resulting from these vicious sexual relations, which, he considers, "are so damaging to good health and good morals, and so fatal to national prosperity, that we cannot go far astray in assaulting them with every available weapon." He gives the history of one case, out of several in his experience, illustrative of the shattered health, perverted morals, and deranged mind which have resulted as the fierce reprisals exacted by Nature for the violation of her laws.

THE CONTAGIOUS DISEASES ACTS.

AMONG the singular occurrences of the week may fairly be included the paper read by Dr. Bell Taylor, on Monday last, at the meeting of the Medical Society. The alleged object of the paper was to show that the failure of the Contagious Diseases Acts to repress disease is plainly demonstrable from the statistics adduced in their support. That any such conclusion is fairly deducible from the figures is, of course, a delusion, and has been shown to be so over and over again. But admitting for a moment that the figures tell less strongly in favour of the Acts than might have been anticipated, this does not prove that the Acts have failed. Yet that they had failed was the conclusion gravely advanced at a scientific meeting to people presumably accustomed to think by a person presumably accustomed to reason. That such an enterprise should have been undertaken is perhaps the best commentary that can be offered on the opposition to the Acts, and is alone sufficient to prove that it is not based on reason.

THE MEDICAL CLUB.

IN deference to the wishes of several members, it is intended to hold a *conversazione* in the rooms of the Medical Club on Friday evening, March 22nd, and steps are now being taken to render the undertaking interesting and successful by procuring a variety of objects of scientific and general interest for exhibition. It is proposed to entertain several distinguished persons as guests on the occasion; and, with the view of defraying the expenses of the *conversazione*, members of the Club are invited to subscribe half a guinea, and to assist the committee by the loan of any objects in their possession of interest for exhibition. Dr. Lory Marsh, the honorary secretary, has issued a circular to the members of the Club embodying the above proposals, to which he is desirous of obtaining as speedy a reply as possible.

THE "HOSPITAL SUNDAY" MOVEMENT.

ON Sunday last the example of simultaneous collections in places of worship on behalf of local medical charities was adopted for the first time at Leeds. The result will not of course be known for a few days, but we are glad that the *Leeds Mercury* is able to state that as a rule the first "Hospital Sunday" in that town was observed to an extent and in a manner which augur well for the charities that are to be benefited, and for the permanent institution of the movement. One-half of the amount raised is to go to the Infirmary, one-fourth to the Dispensary, and one-eighth each to the House of Recovery and the Hospital for Women and Children. It was "Hospital Sunday" in the Potteries on the 11th inst., when the sum of £543 was collected at various places of worship throughout the district in aid of the funds of the North Staffordshire Infirmary. We understand that the same day was also "Hospital Sunday" in Manchester, but up to the present time we have received no account of the results. Considering the efforts which THE LANCET has made to foster the movement from its first inception, it is not much to ask in return of those who are carrying it out in any part of the kingdom that they will have the courtesy to send us a copy of local newspapers containing any information on the subject.

EXCITABILITY OF THE CENTRIPETAL FIBRES OF THE SPINAL CORD.

DR. DITTMAR has recently undertaken, under C. Ludwig's direction, investigations upon the excitability of the substance of the spinal cord. He has employed rabbits in his researches, which were subjected to the action of woorara, and various sections of the spinal cord were made in various directions; and, as the general result of his experiments, he thinks it is certain that there is a system of fibres in the substance of the spinal cord which, though they do not belong to the nerve-roots, are capable of responding to the action of direct stimuli, and can transmit the impulses thus generated along the whole length of the spinal cord up to the medulla oblongata, where they undergo reflexion into motor nerves.

RECREATION FOR LUNATICS.

SELDOM has the improved treatment of the insane been more happily exemplified than in the series of entertainments provided for them at the Surrey County Asylum. Private theatricals, in which the medical officers and attendants took part, were nightly witnessed by many hundreds of the patients, who seemed to relish the performances quite as much as the gay assemblage of visitors who made up the rest of the audience. Great credit is due to Drs. J. S. Bigg and H. W. Jackson for the share they took in the well-known pieces "Sent to the Tower" and "A Regular Fix," the characters of which were ably sustained by Messrs. Congreve, Davies, and Lucas, and by several of the nurses. If such entertainments were more general, a lunatic asylum would soon cease to be synonymous with an institution whose normal atmosphere was one of gloom, and whose appointments were those of severity and restraint.

THE WEST BROMWICH HOSPITAL.

SOME important innovations in hospital administration are attracting a good deal of attention at various points in the Black Country, along the fourteen miles of continuously gas-lighted road between Birmingham and Wolverhampton. The interest has for some time centred in West Bromwich. This town numbers upwards of 40,000 inhabitants; it is situated between four and five miles from Birmingham, and has for years enjoyed the benefits of a public dispensary with paid medical officers. With its growth in population and wealth, West Bromwich has recently added to its few public buildings a hospital, very prettily if not economically designed, with such luxuries in the construction as tesselated pavements and parian cement. The thought appears to have occurred to some of the wealthy employers who have been instrumental in founding this hospital, that the honour of being attached to it might be

considered a sufficient reward for the medical officers in commutation for the salary they received in the old dispensary days. All parties interested are not agreed on the value of the equivalent; and it has been urged that, with Birmingham and its great hospitals, and numerous consultants so near, the West Bromwich staff have little or no chance of the usual indirect rewards of hospital office, and may equitably claim to be paid for their services. But as the institution has changed its character from that of a dispensary to that of a hospital, there is much to be said against such a course.

LADY CHARLES KER.

WE are glad to learn that Lady Charles Ker, who met with a serious hunting accident last Saturday (17th inst.), is making as good progress as could be hoped for under the circumstances. The symptoms point, we are informed, to injury to the base of the skull, and there has been some considerable loss of blood. The patient lies at a farm-house near Langley, to which she was conveyed immediately after the accident, and Mr. Prescott Hewett and Mr. Oscar Clayton are in daily attendance. Lady Charles Ker being a daughter of the Duchess of Roxburgh, her illness has excited the greatest sympathy in the highest circles, and both Her Majesty and the Prince of Wales have shown great anxiety and solicitude on behalf of the noble patient and her family.

THE GUILDFORD WATER-SUPPLY.

THE Clerk to the Guildford Local Board has been good enough to forward us copies of the reports of the analyses made by Dr. Medlock and Mr. Wanklyn of the water taken from "the new well at Millmead," which is to be distributed to the town. Both gentlemen pronounce the water to be excellent. We do not doubt that such is the case; the only question is, having regard to experience in the matter, how long will the supply be kept uncontaminated? Nature generally provides a pure water-supply, and man takes care that it shall be contaminated as soon as possible, by permitting the intermingling of sewage and other abominations with it. We only hope that the Local Board of Guildford will be able to say in ten years' time that the supply has been kept in a state of purity through the care they have exercised.

INFLUENCE OF DEFICIENCY OF LIME AND PHOSPHORIC ACID ON THE BONES.

DR. WEISKE, continuing his former experiments on the effects of the withdrawal of certain constituents of the body from the food, has selected a goat, and has supplied it with food deficient in lime and phosphoric acid. He gives the results of his experiments in the *Zeitschrift für Biologie*, just published. They are remarkable, and show that the withdrawal of these elements from the food proves injurious to the animal, and may, in fact, ultimately lead to death; but that no change in the composition of the bones can be shown to have occurred, and that the bones do not appear to be rendered thereby more friable.

CONDURANGO.

LORD GRANVILLE has sent to the College of Physicians another box of condurango, received through our Consul-General at New York, with a request that the College will report on its supposed virtues. It appears that there are several varieties of climbing vines in the market which bear the generic name "condurango," and the sample now sent to the College is declared to belong to the true species. The Committee of the College of Physicians were about to draw up a report upon the experiments already made with other samples of the drug, and that report would, we understand, have been entirely unfavourable; but this step has been deferred until the additional experiments shall have been made with the fresh specimen, which has been sent on to the Middlesex Hospital.

PROFESSOR HUXLEY.

WE have great satisfaction in stating that we have been informed by Dr. Bence Jones, the medical adviser of Professor Huxley, that the statement that the Professor has shown a tendency to phthisical disease is quite unfounded in fact. Mr. Huxley has never at any time exhibited any disposition to lung mischief. He is suffering from overwork only, and there is every reason to expect that he will soon return to England in good health. He gave up his place at the School Board in order to spare himself on his return.

THE DEATH-RATE OF EUROPEAN CHILDREN IN BENGAL.

THE report of the Sanitary Commissioner with the Government of India for 1870 affords us some information on a subject to which we have on former occasions called attention. The loss of life among the children, especially the very young children, of Europeans in India is, as our readers are aware, lamentably great. The mortality in the Bengal Presidency during 1870, although very high, was, however, lower than that of former years. It amounted, nevertheless, to rather more than double the mean mortality of children of the same ages in England.

EPIDEMIC DISEASES AFLOAT.

IT is a significant fact, and one particularly pertinent to sanitary legislation, that during the past year not less than 152 vessels arrived at the port of New York with cases of small-pox on board. A total of 365 were affected with the disease, and 82,438 persons were exposed to infection. It is perfectly well known that the vast majority of these vessels came from the United Kingdom, so that we may now fairly include small-pox among our exports to North America, as well as to most other ports visited by the British flag.

SANITARY LEGISLATION.

A COMMITTEE, consisting of Dr. Blakiston, Dr. Chambers, Dr. Barclay, Dr. Stewart, and Dr. Sibson, has been appointed by the College of Physicians to watch the progress of sanitary legislation during the present session, and to report from time to time to the College on the subject, in order that steps may be taken to influence the Government in any particular matter in which it may seem desirable that the College should interfere.

SIR WILLIAM GULL.

WE heartily congratulate Sir William Gull, Bart., on the additional mark of Royal favour which has been conferred upon him by the Queen, in his appointment as one of Her Majesty's Physicians Extraordinary.

THE CAROLINA SISTERS.

OUR readers will find an interesting correspondence in another part of our journal relative to the physiology of the nervous system of these remarkable individuals.

THE General Medical Council will meet at Soho-square on Thursday, the 29th inst.

THE opposition to ladies studying medicine is not confined to the academic and hospital authorities of Edinburgh. The directors of the medical mission of that city have declined to let them attend their humblest dispensary, though one of the applicants intimated as her reason for wishing such practice that she intended to go out, when qualified, as a medical missionary to India.—Again, at a recent examination held at the Melbourne University three lady candidates presented themselves and passed, two of them matriculating. The Council of the University, however, immediately passed a resolution to the effect that ladies should not be allowed to matriculate.

THE examinations for the public services have concluded this week, and have resulted in the selection of twelve candidates for the British Army, forty-two for the Indian service, and seventeen for the Royal Navy. We understand that the first candidate for the British army is a student from Cork, and the first for India is a gentleman who came out first in the army examination a year ago, and has now refunded his year's emoluments in order to enter the Indian medical service.

ON Tuesday afternoon Mrs. Anderson, M.D. of Paris, gave the first of a course of lectures on Physiology, in connexion with the North London Ladies' Education Association, held in the Literary Institution, Wellington-street, Islington. The lecture, necessarily somewhat of an elementary character, was listened to by an appreciative audience of 250 ladies, who seem to act upon the principles of the Edinburgh students and make the lectures exclusive of "the other sex of"—woman.

THE French national subscription has been warmly taken in hand by the wives of the leading medical men of Paris, and an influential committee has been formed, at the head of which is Madame Wurtz, wife of the Dean of the Faculty, supported by Madame Nélaton and Madame Barth as vice-presidents. The medical press are enthusiastic and unanimous on the subject, and great things are expected from the patriotic work which the ladies have undertaken.

MR. RUSKIN declines to express an opinion or to take any steps in the matter of his exclusion from the Rectorship of St. Andrews University; while Lord Lytton has not yet replied to his committee's communication. In the not improbable event of his withdrawing from the situation, the Chancellor (the Duke of Argyll) will have to appoint an *ad interim* Rector for one year.

THE College of Physicians at its meeting on Monday last resolved to present an address of congratulation to the Queen on the recovery of the Prince of Wales from his recent illness. Her Majesty has been graciously pleased to express the pleasure which it has given her to receive the address of the Medical Society of London on the same subject.

THE annual dinner of the North Staffordshire Medical Society (which had been postponed in consequence of the illness of H.R.H. the Prince of Wales) was held on the 7th inst. There was a good attendance of members; and the chair was occupied by the president, Mr. W. D. Spanton, of Hanley.

DR. ARTHUR MITCHELL, one of Her Majesty's Commissioners in Lunacy for Scotland, will on Tuesday next commence the Morisonian Lectures on Insanity, in the Hall of the Royal College of Physicians at Edinburgh.

THE annual meeting of the Worcester Chamber of Agriculture was held on the 17th inst., and was largely attended by members of the Chamber, by Guardians of the local Unions, medical gentlemen, and others, on which occasion Dr. Rogers delivered an address on Poor-law Medical Relief, when a long and interesting discussion ensued, in which many local celebrities took part. The proceedings were brought to a close by a vote of thanks to Dr. Rogers, moved by the Chairman of the Pershore Union, and seconded by Sir T. E. Winnington, Bart., which was unanimously adopted.

A MEETING, very largely and influentially attended, was held last week at the rooms of the Social Science Association, Adelphi, in furtherance of efforts to secure the better protection of infant life. Dr. Lyon Playfair, M.P., presided. The hon. secretary, Mr. Curgenven, read the report, which stated that the modified Bill now sought to be introduced would ensure "the registration of persons who take for hire two or more infants under one year of age to nurse for a longer period than a day." On the motion of Dr. Brewer, M.P., the report was adopted.

THE Victoria Hospital for Sick Children at Chelsea and the London Hospital for Diseases of the Chest each claimed a legacy of £1000 bequeathed rather vaguely by a gentleman who died in 1870 to "Victoria-park Hospital." The testator had been a subscriber to the hospital in Victoria-park, and Vice-Chancellor Malins has decided that this institution is entitled to the legacy.

AT a meeting of the Birmingham ratepayers held on the 17th inst. the Bill embodying a new method of dealing with the sewage of the town was approved. The main features of the system which it is proposed to adopt are—the periodical collection of solid matter, a tax on waterclosets so as to limit their number, and the intermittent downward filtration of the liquid sewage. The estimated outlay is £5,000,000.

THE eleventh annual general meeting of the subscribers to the Scottish National Institution for the Education of Imbecile Children was held on the 15th inst. at Edinburgh. The report, which was of an eminently gratifying kind, was read and adopted, after which Dr. Alexander Wood and other gentlemen addressed the meeting.

THE case of feigned disease recorded in our "Mirror" last week was mentioned at the Charity Organisation Society on Monday, and it is proposed that a record should be kept at the central office of all impostures detected by any district committee.

As the Queen desires to make the public ceremonial of the 27th national and representative, the heads of the leading medical institutions have been invited to occupy seats within St. Paul's on the occasion.

THE duty on chloroform imported into this country is (according to the intimation of the Lords of the Treasury) to be charged at three shillings per pound, instead of two shillings as formerly. The two-shilling duty was fixed in August last.

A FRENCH medical monthly periodical has been started at Montreal, under the name of *L'Union Médicale du Canada*. The editor is Dr. J. Prottot. We wish our new contemporary success.

THE International Ophthalmic Congress will meet, the first week in August next, at the College of Physicians.

Public Health.

HEALTH OF LONDON AND THE LARGE TOWNS.

THE mortality in London and the seventeen other large towns was last week at the comparatively low rate of 23 per 1000, ranging for the several towns from 19 in Portsmouth and Leicester to 38 in Norwich; in London it was 21. The deaths from small-pox were 201, the fatality of this disease being equivalent to an annual death-rate of 15 per 1000 in Norwich, 9 in Wolverhampton, 8 in Sheffield, 6 in Nottingham and Newcastle, and 5 in Hull. Bradford was again the only town of the eighteen in which no death from small-pox was returned. In London the mortality was remarkably low, the deaths being 301 below the corrected weekly average; small-pox caused a less number of deaths than in any week since December, 1870. The temperature at Greenwich was again above the average on every day of the week, thus making 67 days of continuous excess of temperature. The number of deaths in London from diseases of the respiratory organs and phthisis was no less than 127 below the corrected weekly average for the season. Forty-five cases of injury and maiming by horses or vehicles in the streets came under the notice of the metropolitan police during the week, the deaths registered from such being 5.

METROPOLITAN ASYLUMS BOARD.—PREVENTION OF SMALL-POX.

It having been found that several persons have been seized with small-pox from having visited their relatives dangerously ill in the small-pox hospitals, the Metropolitan Asylums Board have ordered a notice to be placed in the waiting-rooms of all the hospitals warning persons not to make such visits until they have been properly revaccinated. The managers have at the same time communicated with the Local Government Board, and requested them to issue a notice to the several boards of guardians asking them to direct their relieving officers to give notice to the public vaccinator of the district of every house from which a case of small-pox is sent to the hospitals, and that the latter officer may be instructed forthwith to visit such house and endeavour to persuade the occupiers thereof to be vaccinated or revaccinated, as the case may be, and at the same time to point out the great danger which relatives who desire to see patients dangerously ill incur in going to the hospitals when unprotected by vaccination.

CUBIC SPACE IN SCHOOLS.

The London School Board have resolved that the area of the class-rooms in graded schools should be calculated on the scale of 9 square feet per scholar, and in those of general schools on the scale of 10 square feet per scholar. An undertaking was also given that the school-rooms should in no case be less than 13 feet high. Mrs. Anderson moved that the area should be 10 square feet instead of 9. The amendment was lost.

It appears to us that this is a very bald and insufficient settlement of the question. The Germans, according to M. Tabrum, allow 140 cubic feet per scholar, or 10 cubic feet more than the highest allowance here proposed, and yet, as Lord Lawrence said, the German allowance was not a desirable one to follow. But surely a proper consideration of the subject would have included the questions of warming and ventilating, both of which are of as much importance as that of the determination of the question of cubic space.

LEICESTER UNION WORKHOUSE.

Dr. Clarke is one of the few officers who present an annual report of their labours. The number of admissions to the workhouse hospital was somewhat greater last year, owing chiefly to the cutaneous cases, many of which were vagrants. He says that a favourable opinion respecting the Union infirmaries is gaining ground amongst the poor, and that on the accession of the cold weather no less than 29 medical and surgical cases were admitted in one week, and on the following week 15 into the school infirmaries, the latter being mostly severe frostbites. Skin-grafting has been extensively practised in the cases of ulcerated legs. The progress of the recovery has thereby been remarkably accelerated, and the prospect of a recurrence of the ulceration greatly diminished. All the patients in the lying-in wards have done well. There has been neither scarlatina nor measles in the house. The mortality was 15·0 per cent. on the average number of inmates. One in 26 of the town population died in the workhouse. The scheme for teaching nurses has not succeeded. The useful trade occupations of the district appear to be preferred to nursing. A considerable number of the vagrants are in ill health. More than 300 have been permitted to remain for rest and medical treatment, and many were taken to the infirmary for lengthened treatment. Two children were sent to Margate, and returned in greatly improved health. One was sent to the Orthopædic Hospital, and returned relieved. With regard to extras and stimulants, Dr. Clarke states that he has endeavoured to allow only what the patients have absolutely required, and that he values mutton-chops, eggs, and milk, more than stimulants for broken-down and debilitated constitutions. We wish very much that such reports were more common.

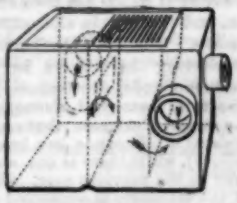
SMALL-POX IN DUBLIN.

Dr. W. M. Burke has presented to the Dublin Medical Society a very interesting account of the epidemic of small-pox in that city. The first case was imported from London, and the first death was registered on the 4th of March, 1871; a second death occurred on the 11th of March. There were 2 deaths in April, 2 in May, 7 in June, 4 in July, 6 in August, and 14 in September. The epidemic was now established; 41 deaths occurred in October, 62 in November, 150 in December, and 75 in the first fortnight of January. Dr. Burke contrasts the energy displayed by the public to prevent the spread of cattle-plague with the indifference as regards small-pox. He says that there is such an utter neglect of sanitary provisions that it is only surprising that the present epidemic has not produced more fatal results. A filthy room crowded with occupants, with a case of small-pox in their midst: to prevent its being sent to the "sheds," in which there are few who have not lost relatives from cholera or fever, the people conceal the nature of the disease under which they suffer, and when the patient dies the "waking" helps to spread the disease. Dr. Burke drew attention to the defective arrangements for removing the patients to hospital, to the absence of convalescent hospitals, and to the value of vaccination properly performed.

In the discussion which followed, Dr. M'Donnell stated that about 20 per cent. of prisoners admitted to the Mountjoy Prison had had small-pox, and that 75 per cent. were vaccinated; he therefore felt convinced that there was a larger number of unprotected persons in Ireland than was generally supposed. Valuable testimony was given by numerous speakers to the success of revaccination.

MANSERGH'S EXTERNAL HOUSE-PROTECTING AND VENTILATING DRAIN-TRAP.

This is undoubtedly a most important and effective trap for preventing the entrance of sewer gases into dwelling houses. The worst that could happen from pressure in the sewers is the discharge of sewer gas outside the external wall of the house, and that may be prevented by connecting the trap with a shaft leading to the top of the building. The apparatus also serves as a grease-trap and yard-gully. These traps make bell-traps on sinks and syphons or waste-pipes unnecessary. They should be universally employed where there are no watercloseets. The watercloset should in all cases have a separate outlet soil-pipe reaching to the top of the house, and there left open to the air.



Merthyr and Dowlais.—The medical officer requests the attention of the Board of Health to the frequent occurrence of persons who have suffered from small-pox exposing themselves in the public streets and places of resort. Also to the overcrowding of the houses at Dowlais. The inspector having been engaged in attending the fitting and furnishing of the hospital and in the removal of the sick, there has

been no inspection of houses let in lodgings. The mortality of unvaccinated patients is unusually high, owing to the number of unvaccinated children and there having been 65 new cases of small-pox in the fortnight. The evil effects of a divided sanitary authority are here well seen. Mr. Simon stated that he wished they had a probe long enough to probe the board of guardians, who had done nothing to suppress the disease. He considered that board a perfectly useless institution, and it was quite necessary that there should be a constant expression of public opinion for the purpose of keeping them in order.

Scarborough.—The special sanitary committee of the Town Council has presented a report recommending that the office of Inspector of Nuisances, which has been vacant for about a year, should be filled up, and they expressed their opinion that it was expedient to appoint a Medical Officer of Health. The report was adopted except as to the appointment of the latter officer, which stands over until the appointment shall be made compulsory. Scarborough ought to be thankful that we have a Parliament anxious to promote sanitary reform.

Wolverhampton.—The Wolverhampton Town Council have sent a deputation to observe the sanitary arrangements of Bristol. The deputation reported that they were favourably impressed with the system of inspection in force under Dr. Davies. They consider that under it infectious diseases cannot spread, and they find the public courts freer from those diseases than parts of the city where the inspectors cannot exercise the same supervision. They draw special attention to the practice of compelling the owners of property to provide water-supply from the public company when, from analysis, the well waters are found impure. They direct attention to the necessity of having sufficient hospital accommodation, and a disinfecting apparatus. These recommendations have been more or less completely adopted, but the arrangements are all temporary in face of the Sanitary Bill.

Dublin.—Dr. Grimshaw has suggested a sanitary organisation for Dublin which would be a great improvement. He proposes to form the medical officers of the Poor-law dispensaries into a sanitary staff, with a general health officer at their head. The organisation would then consist of fourteen health officers and their chief. The plan is estimated to cost about £2000 a year.

Cork.—232 patients have been admitted to the Small-pox Hospital, and there have been 35 deaths. Of 100 unvaccinated patients only 7 had the disease in its mild form, 32 had died, and the rest had been disfigured. Of the 132 vaccinated cases only 3 had died.

THE ARMY ESTIMATES.

WE have before us a copy of the Army Estimates for the ensuing year. On turning to Vote 4—that for the medical establishment and services—we find the sum required is £247,744, being a decrease of £4480 on that of last year. A saving of £1100 has been effected in the cost of medicines, &c., and of £1000 in allowances to private medical practitioners. The Director-General of the Department, who, considering the position he occupies, is about the worst paid man under Government, receives £1500 per annum! The total numerical strength of the department remains the same as last year; but an additional Deputy Inspector-General of Hospitals has been granted (for Aldershot we believe), while there is one surgeon and one assistant less than in the previous year. The great change in this part of the estimates is connected with the Army Hospital Corps establishment, for which the sum of £38,775 is required. The total strength of the establishment will amount to 1336,—a very inadequate provision, we should imagine, for the requirements of our army—composed as follows: 12 officers, 264 non-commissioned officers, and 1060 rank and file. The total expenses of the Military Medical School at Netley, including the salaries of the professors, allowances to the examiners for the medical service, and to the probationers at Netley, with the expenses of school, museum, &c., amount to £8138. The contribution of the Indian Government towards this school for the year 1871 amounted to £3770.

Correspondence.

"Audi alteram partem."

THE CAROLINA SISTERS:

ON THEIR TWO FORMS OF SENSIBILITY, AND OTHER PECULIARITIES OF FUNCTION IN THEIR NERVOUS SYSTEMS.

To the Editor of THE LANCET.

SIR,—We shall feel obliged by your giving a place in your journal to the enclosed correspondence. The condition of the nervous system in the "Carolina Sisters" may not, even in the present uncertain state of our knowledge regarding it, be without interest to your readers; but we hope also that, by making your journal a centre of communication respecting them, we may be able to hear from time to time in what part of the kingdom they are sojourning, and so to glean some farther information from the medical gentlemen on the spot, who may have an opportunity of visiting them.

We remain, Sir, your most obedient servants,

ANDREW BUCHANAN,
JOHN STRUTHERS.

Glasgow, Feb. 8th, 1872.

Glasgow, Jan. 13th, 1872.

DEAR DR. STRUTHERS,—I presume Millie-Christine is by this time in Aberdeen, or will be very soon. As I was too late in my application for a private interview, I shall feel much indebted if you will get me information as to the following points connected with the action of the nerves of the lower limbs.

Sensation and motion in the trunk of the body in each sister is as usual, as also voluntary motion of the lower limbs. On the other hand, sensation in the lower limbs is common; it is said completely so, but it is on this matter that I want information. Theory indicates that, though *mere feeling* may be common, *discriminative sensation* (I mean that on which an idea as to its nature can be formed) should belong solely to the owner of the limbs. I here assume that the account is correct of the two spinal cords and caudæ equinæ being quite separate, the junction being effected by the coccyx and lower third of the sacrum of each body.

That a mere touch is felt by both at the same moment was manifest from the simultaneous motion of the eyes.

Is an impression exciting pain equally painful to each?

Can each tell what part of her sister's limbs is touched—as right or left, which toe, knee, ankle, &c., or is there merely vague feeling without *discriminative* sensation? My view is that the latter cannot be common, but must belong solely to the owner of the limbs. Be good enough to determine this clearly, as I am much interested in it.

In like manner each knows whenever her sister makes a movement, but can she discriminate the exact part moved, the kind of movement, &c.?

You will, I think, from these questions see what my doubts are, and on what they are founded. I shall feel very much obliged if you can remove them, or give me any other remarks on this most interesting case.

I remain, my dear Sir, yours very truly,

Dr. Struthers. A. BUCHANAN.

Aberdeen, Jan. 18th, 1872.

DEAR DR. BUCHANAN,—Your letter reached me on the evening of the next last day of the exhibition of the double girl here. I tried unsuccessfully to see them next forenoon at their hotel, but saw them in the afternoon in the hall, and ascertained what I think will satisfy your inquiries.

(1) Each feels a touch on the lower limbs of the other, and seemingly as distinctly on the right as on the left.

(2) The same of pain.

(3) The same of heat or cold.

I cannot say, from their answers, whether a *similar* impression is more strongly felt on her own foot than on her sister's.

(4) Each *feels* any little *motion*, as of her sister's toes, distinctly. This may be either the feeling of *touch* against the shoe, or the muscular sense.

(5) As far as I can gather there is no transmission of *motor influence* from one to the other. It might have been

so originally, but overcome by the will of the other; but, as far as I can make them understand the question, they do not seem to feel any impulse transmitted, and we may therefore conclude that voluntary motion is originally distinct.

(6) As to *reflex* motion, I could gather nothing, and it would not be easy to determine; but as sensation is common, it is likely enough that reflex motion will be also, as we have no proof, and no reason to believe, that there are two sets of afferent spinal nerves—one for sensation, the other for reflex motion.

(7) As to the point you are chiefly anxious to ascertain, you are quite right—there is no *discriminative* sensation when the lower limbs of the other sister are touched. She not only does not know which toe, but whether foot, ankle, knee, or thigh is the part touched.

I am vexed to find that I omitted to inquire whether she even knows which of her sister's two lower limbs is being touched; but she told me that she did not feel one of them more than the other.

I ascertained the above, not by experimental observation, for which I had not the opportunity, but by careful questioning. They answer so intelligently and readily that I think the replies may be relied on.

By *discriminative* sensation I suppose you mean simply *educated* sensation. Their lower limbs are, to the opposite sister, in the condition of the whole body of a new-born child to itself—feeling touch or pain, but unaware of its locality. How much of this non-localisation of sensation in her sister's lower limbs would you attribute to the absence of the help of vision and of the use of the hands?

Will you kindly return the enclosed page with woodcut from THE LANCET of May 27th, 1871, when you have done with it? You will see that the union affects the whole lumbar region as well as the pelvic. How far the vertebræ—or it may be the cord—are united the dissecting-knife alone can reveal.

Ideal of nervous system in relation to *motion*. No exchange. (The original sketches represented outlines of the brain, spinal cord, and nerves of the limbs.)

Ideal of nervous system in relation to *sensation*. Exchange at lower part of cords or posterior roots of spinal nerves of lumbar and sacral regions.

These are very rude sketches of my notion of how the nervous centres or nerves may be at the union.

As the sisters are very short for their age, the lumbar region may be undeveloped and the cord still low down. But there is evidently union (exchange) of sensory nerve-fibres, either at a partially-united cord or at the posterior roots of the lumbar and sacral nerves. The *posterior* roots being the *sensory* ones, and the union being *posterior*, explains why sensation should be common although motion is not. The fact that *motor* decussation occurs high up, and *sensory* decussation all along the cord, seems at first to bear on the case, but really does not do so; as these decussations concern the separate individual. The fact of sensation being common on the front of the thighs (as they express it, *up to the union*) shows that the roots of the second, third, and fourth lumbar nerves (furnishing the anterior crural) of the two sisters are mingled, so that the nervous exchange probably takes place along the whole cauda equina.

I wish I had had more *fact* to give you; but I hope the above will answer your queries, and I have much pleasure in doing it—indeed, your queries have made me examine into the case more carefully than I had before done.

I am yours very truly, JOHN STRUTHERS.

P.S.—I suppose the case is not a very rare one beyond the fact that they have lived, some such monstrosities being common enough in museums of the domestic animals. I saw a large number lately of these duplicities in the museum of the Veterinary School in Berlin. Are they two girls or one? The correct scientific theory, as Vrolik and others maintain, probably is, not the union of twins, but the splitting up or duplicity of one ovum. Whatever they may have been originally, they are two now to all intents and purposes. As to their four limbs dancing together, it is nothing more wonderful than any well-trained couple dancing a polka.

To me the giantess was a more wonderful specimen. When the baby comes in a few months, it will be interesting to see whether they are to begin a race of giants.—J. S.

Glasgow, 4, Atholl-place, 20th Jan., 1872.

DEAR DR. STRUTHERS,—Many thanks for your kind letter of the 10th inst., and the valuable information it contains. I think you took the very best method to obtain it, considering the intelligence of the two sisters, and that they had no motive for deceiving you. There is one question which, as bearing upon reflex nervous action, I regret did not occur to me till too late—viz., whether, on tickling the right foot of the one sister, it was the left of the other that would be retracted, and *vice versâ*.

The reason of my taking so much interest in the nervous development of the two sisters is that it appears to me to afford a most beautiful illustration of the separate existence of two forms of sensation, which we usually see combined, but which I have long held, both on physiological and psychological grounds, to be quite distinct from each other. I give them the names of *passive* and *discriminative* sensation. By sensation we mean the process or action by which certain changes that take place in the condition of the body excite corresponding changes of consciousness in the mind. In *passive* sensation, the mind, although cognisant of a change, gives no heed to it as it glides past on the ever-varying stream of consciousness. In *discriminative* sensation, on the other hand, the attention is aroused, and the mind voluntarily directs the sentient organs to assist in the performance of an act of judgment as to the nature of the sensations. Discriminative sensation, as implying both volition and judgment, requires indispensably the brain as its chief instrument. Passive sensation, again, has nothing to do with the brain, requiring only the medullary cord, with its nerves and ganglia, for its instruments. This has been demonstrated experimentally by Flourens and other physiologists, who found that, after removing the cerebral and cerebellar hemispheres, while all the higher faculties of the mind were abolished, mere bodily feeling, or passive sensation, continued as acute as before. Now, the Carolina Sisters exhibit to us a similar experiment made by the delicate hand of nature, and as far surpassing the coarse manipulations of the dissecting-room as the answers given by these bright and intelligent girls are more worthy of reliance than the deductions made from the cries and writhings of a mutilated and half-unconscious animal.

If I do not misinterpret your investigations, they lead to the two following conclusions:—1. That each sister has, in her own person, the functions of the nervous system quite complete, having, in particular, perfect sensation over the whole body, and full command over all the voluntary muscles. 2. That each of them, in addition to perfect sensation in her own person, has passive sensation all over the lower limbs of her sister; that she gets from this last source the sense of touch or contact, the sense of pain, the sense of heat and cold, and the sense of movement in any part of the limbs; but that all these sensations are merely passive, and so indefinite that they cannot be made the basis of any act of judgment—as, for instance, to determine whether a touch felt has been made on the great toe, the ankle, the knee, or the thigh.

As to the state of the nervous system which accompanies these wonderful phenomena, we can only guess. According to the medical men who have had the best opportunities of judging of the mode of union of the two sisters, there is no osseous union higher up than the lowest third of the sacrum; but there can be little doubt that the lower parts of both vertebral canals are still open behind, as we see them in the embryo, and as they continue permanently in cases of spina bifida. The coalescence of the two embryos must have taken place at a very early period of development,

and the bones would thereafter adapt themselves to the condition of the soft parts. We have simply, however, to inquire what mode of union of the true nervous systems would produce the phenomena described above, and none other. We must, I think, put aside the hypothesis that the two spinal cords are united posteriorly at their lower ends, or that there is a coalescence or intermingling of the posterior roots of the two cords; for each sister has the functions of the nervous system perfect in her own person, which she could not have without a normal structure of the cord and normal distribution of the nervous fibres. It seems to me more probable that there is fusion of the lowermost intervertebral and sympathetic ganglia. There might be a necessity for the conjunction of the latter to give unity of action to the conjoined pelvic viscera. We have, however, at present only to do with the former, which we must suppose to be coalescent, and so to form only a single instead of a double series from the second lumbar vertebra downwards. In this way each ganglion becomes the common centre to the same nerves of the right and left limbs, alternately, of the two sisters, and sends a commissure (posterior root) to the alternate sides of the two spinal cords; and every impression made on the nerves of the lower limbs follows a single tract as far as the intervertebral ganglion, where, divaricating, it passes by the two commissures to the alternate sides of the two cords. By this arrangement the two sisters, speaking of them together, have sensation and cross reflex action everywhere over the four lower limbs; but speaking of them individually, each sister has perfect sensation, voluntary motion, and direct reflex action in her own limbs, while over the limbs which do not belong to her she has no voluntary power of motion, and derives from them only passive sensation and cross reflex action.

Speculations like these are of little moment compared with the unquestionable fact that you have ascertained, that each sister has one kind of sensibility in her own limbs, and another quite different throughout the limbs of her sister. This seems to me so important that you should lose no time in communicating it to the medical public, who are manifestly not aware of it nor alive to its important bearings. If we are still to look upon the head as "the dome of thought," are we no longer to regard it as "the palace of the soul"?—that is, are we to assign to consciousness a wider residence in the three layers of the germinal membrane and the tissues developed from them? British physiologists could not but regret deeply if these bright girls were allowed to leave this country before every fact connected with their complex organisation had been carefully ascertained; more especially as centuries may elapse before such another opportunity presents itself of cross-questioning nature as to the laws by which she governs the nervous system.

I remain, yours very truly,

Professor Struthers. A. BUCHANAN.

THE CHOLERA.

To the Editor of THE LANCET.

SIR,—I beg to enclose an extract, of recent date, taken from one of the official organs of the Russian Government. [The extract is as follows:—"Le choléra a de nouveau éclaté à Réval. Depuis le 24 Novembre, jour où le premier cas a été constaté, jusqu'au 31 Décembre, 93 personnes ont été atteintes de l'épidémie, et 42 ont succombé. Au 31 Décembre il restait 50 personnes en traitement.—*Reval'sche Zeitung.*"] It tells its own sad tale; unfortunately it is not, I regret to state, by any means a solitary instance, showing the present (and may be increasing) activity of cholera in Russia, especially in its Baltic provinces. It is, therefore, only reasonable, and in accordance with all former experience, to forecast that "spring" outbreaks of it, with its still wider geographical distribution, may soon follow. The navigation of the Baltic will shortly be again in full swing, and though we, as Englishmen, may be thankful that cholera last year at all events *did not live at any of our ports or spread on shore*, yet we ought not in all prudence to calculate on its "behaving" in like manner in 1872.

How heavy then become, at this present juncture in sanitary matters, our duties and responsibilities should there happen to be any supineness or lack of any thoroughly efficient and practical preparedness in our organisation, either *local* or *central*, in order to meet the approaching epidemic on our shores. Our motto should be, "To be forewarned is to be forearmed."

I am, Sir, yours respectfully,

Feb. 19th, 1872. WILLIAM D. MICHELL.

EDINBURGH UNIVERSITY.

To the Editor of THE LANCET.

SIR,—In the course of your remarks in last Saturday's LANCET on the conduct of some of our students during Sir Wm. Stirling-Maxwell's address, the following passage occurs:—"The truth is, a class of young men, inferior socially to their predecessors of ten years ago, now resort to the Edinburgh school, which has lost much of its attractiveness now that London and other seats of learning are so well appointed and so efficiently worked." As Dean of the Medical Faculty, I feel it my duty to state that you have cast a wholly unmerited slur upon our present students, who, while they are more numerous than in any previous session for forty years, are in social position not one whit inferior to their predecessors.

I am, Sir, your obedient servant,

J. W. BALFOUR, M.D., F.R.S.,
Dean of the Medical Faculty.

University of Edinburgh, Feb. 19th, 1872.

PARIS.

(FROM A CORRESPONDENT.)

THE various medical men who form part of the National Assembly have formed the excellent idea of joining in a body under the denomination of "Free reunion of the medical men, members of the Assembly." Their object is to meet at regular intervals, and discuss all questions of medical import which are presented, or may be presented, to the Assembly. These questions are at present numerous, as several Bills are in preparation touching medical assistance in the country districts, the free teaching of science, a new organisation of the teaching of medicine, &c. It is quite obvious that the medical members of the Assembly may in this way render great services to science, the Assembly, and the country. As they belong to all the various political groups represented in the Chamber, their unanimous decisions on questions of medicine and science cannot be suspected of party feeling or onesidedness, but as the mere dictates of science, and will consequently be of great weight in the debates at the Assembly. Besides the questions which I have mentioned, the Free Society of Medical Deputies, if they wish thoroughly to carry out their object, will have to consider many others, and, indeed, will always have plenty of work on their hands, so intimate is the connexion of medicine with almost all subjects bearing upon the public good. Their business obviously must be, not only to discuss such questions as may crop up at the Assembly, but to prepare a complete organisation of all matters affecting the public health and the preservation of life, so as to initiate in the Assembly various measures of sanitary reform, and to obtain through their influence the adoption of such legislative practices as may conduce to the sanitary improvement of the country. The importance of this group of medical men, which already numbers twenty-two members under the presidency of Dr. Roussel, and the consideration of the great good which they may be called upon to perform by proposing sanitary measures to their colleagues, show how necessary it is that the medical profession be fairly represented in Legislative Assemblies.

A Paris contemporary, commenting upon the organisation of this group, refers in the following forcible terms to one of the subjects which most urgently need reform—namely, the organisation of nosocomial institutions. "The mere lodging of a patient in the hospitals of the larger cities costs, according to circumstances, 1500 francs, 2000 francs, 2500 francs, and even more; and in Paris the amount must be valued at 4500 francs (£180); so that it would cost less to give to each patient in Paris a complete apartment with gilt walls, and in other towns a large house with a garden.

And these incredible expenses only serve to create so many centres of miasm. We do not allude to the Hôtel Dieus of the Empire, but to the hospitals constructed according to the laws of hygiene—and unfortunately they are rare in France. The best of hospitals will be never worth a well-ventilated apartment with only one patient. Therefore, the question is not one of mere reform, but perhaps of a suppression, or of the institution of quite a new order of things; for instance, of small *maisons de santé* with not more than fifty beds, and which would be built of wood and burnt down every twenty years. At the very least, we should witness the disappearance of those dens of puerperal fever which are called *maternities* (lying-in hopitals). These are things which the medical deputies can alone make known with authority, and above all, with effect.

Whilst on the subject of the medical members of the Assembly I must mention the patriotic motion which Dr. Bouisson (Dean of the Montpellier Faculty) brought before the House a few days ago for obtaining the liberation of the French territory by means of a national subscription, and which he wound up by the announcement that he would be the first to subscribe for 10,000 francs. It is highly gratifying, whether Dr. Bouisson's proposal was practical or not, that such a patriotic appeal was due to one of the profession. Indeed, too much credit cannot be given to the members of the profession in France for the patriotic zeal and devotion to their country and countrymen which they have displayed since the late war first broke out.

A *concours* of great interest is now being carried on in the Faculty by the public competition of seven vice-professors to the school. The contest is a very close one, all the candidates (seven in number) being very good, and great interest is taken concerning the results of the *concours* by the great body of medical students. The first test was a written composition by all the candidates on the "Anatomy and Physiology of the Pulmonary Lobules." All the compositions bore the character of great physiological learning in the candidates, and showed the results of the considerable attention which has within the last few years been given here to this branch of the medical sciences. The second test has consisted in two of the candidates being called upon at each sitting to deliver a lecture after three hours' reflection on a question of pathology. Five sittings have already taken place, and the subjects chosen for the lectures were: insufficiency of the tricuspid, abnormal variola, rheumatism, ulcers, membranous stomatitis, and cerebral rheumatism.

Parliamentary Intelligence.

HOUSE OF COMMONS.

FEB. 16TH.

PUBLIC HEALTH.

MR. STANSFELD asked for leave to bring in a Bill to amend the law relating to public health. The measure had for its object the reconstruction upon a simple basis of the local sanitary authorities of the country, and the creation of new powers to be exercised by those authorities. He proposed to divide the authorities into urban and rural; the former to be the town councils in boroughs, the improvements commissioners in Improvement Act districts, and the local board in local board districts; and the latter to be boards of guardians, with the exception of those who represented the urban portions of unions. Upon these local authorities would be conferred the powers of the Sewage Utilisation Acts and the Nuisances Removal Acts. Powers would also be created by provisional order, confirmed by Parliament, to combine districts for sanitary purposes which might seem to call for wider area than the unit. The local sanitary authorities would have the right of looking into the condition of house drainage, both inside and outside the dwelling, and of taking care that such sources of disease should not affect the health of its inhabitants and the surrounding population. Those authorities would also have power to test the purity of the water supplied by the water companies. As to food and its adulteration, the existing powers to seize unwholesome food would be extended; and the local sanitary authorities would act under the Food Adulteration Bill of 1860. They would further have to provide hospitals for epidemics, institute Poor-law dispensaries, and provide drugs for paupers, the same authorities having the appointment of the necessary sanitary and medical officers vested in them.

Sir C. B. ADDERLEY regretted that the Bill did not consolidate as well as amend. Its provisions were, however, absolutely essential, and he promised to give his zealous co-operation in making the measure as perfect as possible in committee.

Leave was then given to bring in the Bill.

Leave was also given to Sir C. B. Adderley to introduce a Bill consolidating and amending all the laws on public health and local government in England and Wales. The Bill will come on for second reading on the 7th March.

Sir R. Anstruther obtained leave to introduce a Bill to amend the law relating to the sale of intoxicating liquors.

Obituary.

M. LAUGIER.

THIS eminent surgeon, who for the last eighteen years had held the chair of Clinical Surgery at the Hôtel Dieu of Paris, died on the 15th inst., at the age of seventy-three. The deceased belonged to the group of skilful surgeons who grew up under the teaching of Dupuytren, and who gained their steps by competition. All the honours and dignities which in the French capital are bestowed upon talented and successful men were bestowed upon him; and he thus took a prominent rank among his own family, all distinguished in the scientific world, especially Fourcroy. M. Laugier was not what is called a brilliant operator, but aimed particularly at benefiting his patients by conservative surgery. To the late professor we owe the explanation of the escape of serous fluid in fractures of the base of the skull; and he was the first to show how a hernia passes through Gimbernat's ligament. He proposed suction in the operation for cataract, and laying open the antrum in the treatment of fistula lachrymalis. It should also be mentioned that M. Laugier advocated long ago complete occlusion, by means of gold-beaters' skin, in the dressing of wounds. A vast concourse of delegates from scientific societies and a crowd of friends and former pupils attended the funeral.

DR. EDWIN JONES,

OF RHYL.

IT is with considerable regret that we announce the death, after a long and painful illness, of Dr. Edwin Jones, who died on January 9th. The funeral was not only the largest and most respectable that has taken place at Rhyl for many years, but the inhabitants of no town could have shown deeper sorrow for the loss of a fellow-townsman or evinced greater sympathy with the bereaved relatives. Dr. E. Jones was formerly a pupil of Dr. Evan Pierce, of Denbigh, and afterwards studied at the Edinburgh University, where he displayed great ability and gained several prizes. In 1855 he went to reside at Rhyl, and soon obtained a most respectable and extensive practice. He was particularly active and intelligent, being a most indefatigable practitioner, skilful operator, and an able physician. He married the second daughter of J. P. Williams, Esq., of Rhyl, by whom he had four children, who are left to deplore his loss.

WILLIAM RAYNER, M.R.C.S.

WE have to record the death of this accomplished gentleman and practitioner, which took place at Uxbridge on the 26th of January last. Mr. Rayner studied at Guy's, St. Thomas's, and the "Grainger" School of Medicine, passed the whole of his professional life at Uxbridge, and gained the sincere esteem of a very large circle of friends and clients. He was a frequent contributor to THE LANCET, and furnished a series of papers to the *Cottage Gardener* on Botany and other kindred subjects, the latter of which were remarkably successful on account of the popular style in which they were written. It is a noteworthy fact that

Uxbridge was the first town in England to petition for the application of the Public Health Act, and it is a great pleasure to record that Mr. Rayner was the prime mover in this very sensible proceeding.

EUGENE NOLAN, M.D.

THIS gentleman died on the 12th inst., from that scourge of our profession, typhus fever, which he contracted in the discharge of his professional duties. Dr. Nolan was only twenty-eight years of age; he had been attached as medical officer to the Castlecomer Workhouse Infirmary for some time past, and was much esteemed for his kindness of heart and amiability of disposition.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. — At an extraordinary meeting of the College on the 19th inst., the following gentlemen were granted licences to practise Physic, including therein the practice of Medicine, Surgery, and Midwifery:—

Baber, Edw. Cresswell, M.R.C.S., Thurloe-square.
Bland, George. (Passed Exam. in Medicine Oct. 1871, and has obtained a recognised qualification in Surgery.)
Hammond, R. E., M.R.C.S., Booth-st. East, Chorlton-upon-Medlock.
Kiddle, J. Nelson, M.R.C.S., Guy's Hospital.
Ticehurst, C. Sage, Carlisle-parade, Hastings.
Tweedy, John, University College Hospital.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Feb. 15th:—

Armstrong, Edward John, Wiesbaden.
Price, Hugh Pugh Jones, Hulme, Manchester.
Sloan, Ebenezer Erskine, Lisburn, Ireland.
Smith, George Francis Firby, Northampton.

As Assistants in Compounding and Dispensing Medicines:—

France, Joseph, Rotherham.
George, John, Kidderminster.
Hannaford, William, Irthlingborough.
Lingwood, William, Kensington.
Parson, Henry James, Ely, Cambridgeshire.

On the same day the following gentlemen passed their First Professional Examination:—

William Henry Anderson, St. Mary's Hospital; Evan Marlett Boddy, Guy's Hospital; Cottingham Greaves Johnson, St. Thomas's Hospital.

PETITIONS have been presented to the Parliament of Victoria, praying that the University may be compelled to grant degrees to ladies.

LORD H. SEYMOUR'S WILL.—By an order issued from Chancery Chambers on the 17th inst., an additional £100 will be received by each of the eighty-five London "hospices," which have already benefited to a considerable amount under Lord Seymour's will.

IMPULSIVE INSANITY.—A pamphlet by M. Dagonnet (being a reprint of an article in the *Annales Medico-Psychologiques*) has just been published by T. B. Baillière. We mention this circumstance as recent trials will give the opinions of the French author peculiar interest.

THE Archbishops of Canterbury and York and the Bishop of London, as trustees of the Cholmondeley Charities, have awarded a donation of £50 to University College Hospital, a moiety of which is to be devoted to the funds of the baths for skin diseases.

BALLOONS.—Much interest was excited at a late meeting of the Academy of Sciences of Paris by a communication of M. Dupuy de Lôme, who is endeavouring to discover the means of directing balloons. During the siege of Paris M. Dupuy was requested by the Government to seek means of guiding balloons, but circumstances prevented the regular succession of trials. Lately, however, an ovoid balloon was fitted, carrying a boat containing fourteen people. Eight of the latter turn a wheel or helix, which describes twenty-six turns per minute and acts as a propelling agent; the other persons of the crew relieve those first employed when tired, and the helmsman directs the machine. The balloon on the 2nd inst. started at 1 o'clock, and rose to a height of about a thousand yards; a few hours afterwards it touched ground near Compiègne, after having evidently obeyed the impulse given by the helix and the helm.

Medical Appointments.

BONNEY, W. A., M.R.C.S.E., has been elected Medical Officer for the North-West District of the Parish of Chelsea, vice M. Ward, L.R.C.P.Ed., F.R.C.S.E., deceased.
BRIGSTOCKE, C. A., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Calne Union, Wilts, vice D. Campbell, M.D., resigned.
CHANDLER, T., M.R.C.S.E., has been appointed Medical Examiner to the Royal Asylum of St. Ann's Society.
DAVIDSON, A., M.A., M.B., has been elected a Physician to the Northern Hospital, Liverpool.
DICKINSON, E. H., M.B., has been elected a Physician to the Northern Hospital, Liverpool.
FERRIER, D., M.D., M.A., has been appointed Professor of Forensic Medicine at King's College, London, vice W. A. Guy, M.B., F.R.C.P.L., resigned.
FRANKLIN, G. C., L.R.C.P.L., M.R.C.S.E., has been appointed Resident Medical Officer to the City of London Hospital for Diseases of the Chest, Victoria-park.
GIBSON, D., M.R.C.S.E., has been elected Medical Officer for the Western District of the Kingston-upon-Hull Incorporation for the Poor, vice W. Day, M.R.C.S.E., resigned.
HADDELSEY, C. T., M.R.C.S.E., has been elected a District Medical Officer for Mile-end Old-town, and Public Vaccinator at the Workhouse and Schools, vice H. C. Robinson, M.R.C.S.E., deceased.
HILL, A., M.R.C.S.E., has been appointed Medical Officer for the Blakesley District of the Towcester Union, vice T. O. Walker, M.R.C.S.E., resigned.
HOSKING, E., M.R.C.S.E., has been appointed Resident Medical Officer to the Bloomsbury Dispensary, Great Russell-street, vice J. Grimes, M.D., M.R.C.S.E., resigned.
JEAFFERSON, C. S., M.R.C.S.E., has been appointed a Surgeon to the Newcastle-upon-Tyne Hospital for the Diseases of Children, vice H. Bidley, M.R.C.S.E., deceased.
LAWRENCE, H. M., L.R.C.P.Ed., L.R.C.S.Ed., has been elected Medical Officer and Public Vaccinator for District No. 4 of the Tonbridge Union, vice E. M. C. Hooker, L.R.C.P.L., M.R.C.S.E., resigned.
LEWIS, Mr. F. W., has been appointed Resident Obstetric Assistant to the Middlesex Hospital, vice J. W. Langmore, M.B., whose appointment has expired.
MARSHALL, L. W., M.B., C.M., M.R.C.S.E., has been appointed Assistant House-Surgeon to the General Hospital, Nottingham.
MAGILL, W., L.R.C.P.Ed., has been appointed Surgeon to the Ancient Order of Free Gardeners, North Sunderland; also Medical Referee to the Prudential Assurance Society.
ORCHARD, T. N., M.B., C.M., has been appointed Assistant Medical Officer to the Salford Union Workhouse, vice J. F. W. Tatham, L.R.C.P.Ed., L.F.P. & S. Glas., appointed Medical Officer for St. Michael's District, Manchester.
PATTERSON, A., M.D., F.R.C.S.E., has been appointed a Surgeon to the Glasgow Lock Hospital, vice G. H. B. MacLeod, M.D., F.R.C.S.Ed., resigned.
RIX, R., M.R.C.S.E., has been appointed Resident House-Surgeon and Secretary to the Tunbridge Wells Infirmary and Dispensary, vice F. de Havilland Hall, M.B., M.R.C.S.E., resigned.
SMITH, C., M.R.C.S.E., has been appointed Medical Officer for the Broadwater District of the East Preston Union, vice A. Sharpe, M.D., L.R.C.S.Ed., resigned.

Births, Marriages, and Deaths.

BIRTHS.

FURBER.—On the 14th inst., at Maidstone, the wife of Geo. Henry Furber, M.R.C.S.E., of a daughter.
LEIGHTON.—On the 12th inst., at The Danes, near Hertford, the wife of E. T. Leighton, M.B., of a daughter.
MURRAY.—On the 19th inst., at Toberscurry, Co. Sligo, the wife of Thos. S. Murray, L.K.Q.C.P.I., of a daughter.
ORD.—On the 16th inst., at Streatham Paragon, the wife of Dr. W. M. Ord, of a daughter.
SWALES.—On the 14th inst., at Alexandra-terrace, Sheerness, the wife of Peter Swales, M.R.C.S.E., of a daughter.

MARRIAGES.

HATCHELL—COVE.—On the 6th inst., at St. Paul's, Bursalem, Frederick Hore Hatchell, L.R.C.S.I., to Clara Ellen, daughter of the late W. S. Cope, Esq.
TURNER—DUKE.—On the 12th inst., at St. Mary's-in-the-Castle, Hastings, Richard Turner, M.R.C.S.E., of Lewes, to Elizabeth Blackman Duke, daughter of the late Walter Duke, M.R.C.S.E., of Hastings.

DEATHS.

BRADBURY.—On the 1st inst., B. Bradbury, M.D., of Oldham, aged 48.
MAXWELL.—On the 15th inst., at Stickney, near Boston, Ernest Arthur, youngest surviving son of P. Maxwell, M.D.
PALMER.—On the 10th inst., at Loughborough, Leicestershire, Wm. Grimes Palmer, M.R.C.S.E., aged 64.
PIERPOINT.—On the 11th inst., at Hastings, Nathaniel B. Pierpoint, M.D., M.R.C.S.E., of Little Pulteney-street, Golden-square, aged 53.
ST. JOHN.—On the 1st inst., at Maryland-road (the residence of his brother-in-law), Chas. St. John, L.R.C.P.L., of Cambridge-gardens, Kilburn, aged 33.
TATHAM.—On the 13th inst., R. Tatham, L.R.C.S.Ed., of Burton-in-Lonsdale, aged 72.
TOWNSEND.—On the 29th of Jan., Chas. Townsend, M.R.C.S.E., of Birmingham, aged 46.
VALLANCE.—On the 2nd inst., Wm. Vallance, M.D., of Bath-street, Portobello, Edinburgh, formerly Surgeon 33rd Regiment, aged 85.

THE PROPOSED CONJOINT BOARD FOR SCOTLAND.

225, St. Vincent-street, Glasgow, Feb. 19th, 1872.

DRS. GAIRDNER (Glasgow) and SANDERS (Edinburgh) request the favour on the part of THE LANCET of the insertion in next number of the enclosed document, which is being signed in Edinburgh and Glasgow with a view to the approaching meeting of the General Medical Council. It is not desired or expected to obtain very numerous signatures, but by a previous publication to afford such persons as have been strongly impressed with the evils to be apprehended from rash legislation in the proposed direction, the opportunity of expressing their opinion in time.

Copies of the memorial may be had for signature on application to Mr. George Richardson, University Printing Office, Glassford-street, Glasgow; and the signed documents should be directly transmitted to the Registrar of the General Medical Council, 32, Soho-square, London.

The undersigned having been informed of the recent proceedings on the part of the Universities and Corporations in Scotland, with a view to the formation of a Conjoint Board of Examination at the instance of the Medical Council, feel bound to indicate their dissent from these proceedings on the following grounds:—

1. The reason alleged for such proceedings in the first instance—viz., the attainment of "uniformity of qualification," i. e., a fixed minimum of medical knowledge and skill on the part of candidates, secured through examinations conducted upon a precisely similar plan by examiners making precisely similar requirements, appears to the undersigned an object neither desirable nor attainable.

2. Even were the object in question a desirable one, it evidently cannot be secured by the measures proposed. It is inconceivable that one Board sitting in England, another in Scotland, and a third in Ireland, each Board being of very complex constitution, and holding examinations in different places, without any concert or intercommunication, could possibly secure "uniformity" in any real sense of the word.

3. The immense number of candidates which would have to be examined in each division of the kingdom by the Conjoint Boards would make it absolutely necessary either greatly to enlarge the number of examiners and to subdivide them into companies (of course with a still farther loss of "uniformity" as regards results), or to work one set of examiners continuously day after day for long periods, with the practical effect of reducing their operations to a wearisome routine, incompatible with other professional pursuits on the part of the examiners, and entailing great hardship upon candidates by want of accommodation with the sessional arrangements of the principal medical schools.

4. The expense of examinations so conducted would be, if thrown upon the candidates, a very serious addition to the cost of medical education and qualification, without any commensurate results as regards the security of the public.

5. The undersigned are decidedly of opinion that if, for the public security, an additional examination requires to be introduced over and above the nineteen at present in operation, the cost of such additional examination should in any case not be thrown upon the candidates, nor yet on the existing examining bodies, but should be defrayed by the State, as representing the public.

6. The true object to be aimed at, whether in view of the public interest or that of the medical profession, is (in the opinion of the undersigned) *not* uniformity, nor yet a fixed minimum of qualification, but the watching and stimulating the existing examining boards through a systematic inspection, conducted under the auspices either of Government or of the Medical Council.

7. The undersigned profess themselves willing and anxious to facilitate to the utmost a thoroughly efficient system of examination in the Universities and Corporations with which they are severally connected, and would gladly welcome the visits of any inspectors appointed on the part of the public to secure, as far as may be, efficiency on the part of all such examining bodies in the performance of their important duties. In the case of the Universities, such a system of inspection would be quite in accordance with the system already introduced by the Universities Act of Non-Professorial Examiners. The undersigned are thoroughly satisfied with this system, and believe that an extension of it would do good.

8. The details of such inspection should, in the opinion of the undersigned, be arranged between the State, as representing the public, and the Medical Council as representing the medical profession.

9. The undersigned desire it to be understood that, so far from objecting to a "Conjoint" system of examination, they would cordially welcome any voluntary joint action of different Boards with the view of diminishing the labour and responsibility of examination, and the expense and trouble of it to the candidates. The objection that they entertain to the proposed system is, that it would not diminish either the expense or the trouble to the candidates, but would, on the contrary, increase both; while, by removing the responsibility of the practical part of the examination in some measure from the existing Boards, it would tend very much to reduce all medical examinations to a low dead level, and would render it nearly impossible to improve them in accordance with the demands of advancing medical knowledge.

February, 1872.

Notes, Short Comments, and Answers to Correspondents.

ARMY MEDICAL SERVICE.

WE have received a copy of a circular on the financial position of Government in relation to the Army Medical Department, containing the extract from the *Army and Navy Gazette* as to the prospects of the army assistant-surgeons. Want of space precludes our alluding to the subject this week; but we can only reiterate a hope that Mr. Cardwell will at once set forth some scheme for improving the present dreary prospect before the junior ranks of the service.

Senior Student.—1. Soelberg Wells's Treatise.—2. Allen's small work on Aural Catarrh.—3. Aitken's Science and Practice of Medicine; or, if this work be considered too large, Dr. Hartshorne's Essentials of Medicine.

A CASE IN COMPARATIVE PATHOLOGY.

THE extreme rareness of the recovery of a monkey from an attack of acute pneumonia in this country, and especially during the winter, makes the following case of a chimpanzee in the Zoological Society's Gardens of some interest. The animal, not much over two years old, caught a violent cold and cough during a frosty night in the beginning of January, upon which its appetite failed, and the breathing became very rapid, the pulse rising to 140 and more in a minute, being normally below 100. It lost its usual activity, and kept close to the fire in its room, taking but little notice of anybody. Its tongue was thickly coated, and on the following day fine crepitation was distinctly heard over the back of the chest, especially on the left side. The breathing rose to about 80 a minute, and the nostrils dilated with each respiration; the skin was very dry and hot. The only things it would take were grapes, or the juice of an orange, and a little milk. The urgent symptoms increasing, and the skin remaining very dry, it was persuaded to take small doses of liquor of acetate of ammonia, with ipecacuanha wine and aromatic spirit of ammonia, every four hours. After the first dose the skin appeared less dry, and after the second it had become quite moist and pliant. At this time a linseed-meal jacket poultice was bound round its chest, and kept so for an hour or so at a time, being reapplied three or four times a day, and, when removed, being replaced by a flannel band, and a cloth jacket over that. In two or three days the crepitation had become much coarser, the breathing not changing in rapidity, and the weakness increasing to such an extent that the animal lay on its back or a little on one or other side, with its arms out and its hands open, as if it were too exhausted to make any effort at all. The creature objecting so violently to the cough mixture, it was thought best to discontinue it, and to let it have some ipecacuanha wine in its milk, which it did not detect. This was next discontinued, as the exhaustion greatly increased, the breathing still maintaining its rapidity; the crepitation being very coarse and very general, and the pulse high. A teaspoonful of brandy was then added to its milk each time it took it, which it did very unwillingly, and this was continued regularly. Still it would take nothing but the milk and grapes, and continued for some days to be listless, presenting one of its feet to anyone it knew, and evidently liking to be attended to and nursed. For three or four days it seemed impossible that it could recover; but the poultices and brandy were continued, and milk was given it by teaspoonfuls as often as it could be made to take it. A change then rather suddenly occurred for the better: the crepitation decreased; the respiration was clearer and less rapid; the appetite also improved, though for a few days it would take no solid food, except from the keeper's mouth. In about a fortnight from the commencement of its illness it began to move about a little and, though much thinner and weaker than before the attack came on, it gave hopes of a complete recovery; its appetite improved, the tongue at the same time becoming cleaner and the chest clearer. In another week it was almost free from cough, and in excellent spirits, though still very weak, being unable and unwilling to try to climb its ladder and take active exercise. The animal is now as lively as ever.

G. T. C.—The article is very scarce. Our correspondent might apply to Mr. Robert Cealy, Aylesbury, Buckinghamshire.

TREATMENT OF ENTERIC FEVER.

To the Editor of THE LANCET.

SIR,—Dr. Maclagan states in his letter in your last number that I was not aware but that his whole paper had appeared in the *Dundee Advertiser* until he informed me on the 16th inst. This must be a misunderstanding on his part, as my note in the same number is strictly accurate.

I am, Sir, yours respectfully,

Dundee, Feb. 19th, 1872. J. W. MILLER, M.D.

*** Here this correspondence must terminate.—ED. L.

A Subscriber.—Poor-law medical officers *ought* not to supply linseed meal or any medical appliances; but, so long as they contract to find drugs and medical appliances, they are bound to do so. Nevertheless, in some unions the guardians have been induced to supply linseed-meal.

Mr. Charles Francis (St. John's-wood) had better consult some hospital surgeon.

THE USES OF THE UVULA.

To the Editor of THE LANCET.

SIR,—In your journal, Dr. Garrett about twelve months ago laudably endeavoured by careful investigation to arrive at the proper uses of the uvula. After having allowed sufficient time for discussion, the matter was closed without any very satisfactory result.

Now that the consideration of the question has been reopened by Sir G. Duncan Gibb, Bart., and handled with evident care and ability, I venture, with all due deference to the views of others, to make the following remarks which I have long held upon this apparently difficult subject.

In its quiescent state, the uvula is, I believe, acknowledged by most authorities to rest upon the base of the tongue; and it has often occurred to me that its use, when so placed, is to act as a conductor or guide to the liquid matters secreted within the posterior nares, and thereby to prevent the glottis from being taken by surprise by a sudden deluge, or constant and irregular leakage, from the posterior nasal surfaces. When the uvula is so resting on the base of the tongue, the velum palati hangs loose, and acts as a curtain of separation between the buccal cavity and pharynx. In this state of repose it acts as a guide or drain to the secreted fluids, and in this way conducts them gradually to the base of the glottis, where, after an inconvenient accumulation, irritation is set up, and the result is either involuntary deglutition, or hawking forcibly, according to degree of excitement produced. I remain, Sir, yours, &c.,

Mainhouse, near Kelso, N.B., Feb., 1872. ROBT. PURVES, Surgeon.

THE DUTIES OF REGISTRARS.

Mr. J. Clarke, (Lynton.)—1. The Registration Act requires the registrar "to inform himself carefully of every birth and every death which shall happen within his district, and to learn and register as soon after the event as conveniently may be done" the particulars required by the Act. It is not compulsory upon anybody to send notice of a birth or death to the registrar, nor does the Act specifically require the registrar receiving such notice to visit the house where the event occurs for the purpose of registering it. But, as a matter of fact, the official regulations which are sanctioned by the Home Secretary, and have therefore the force of law upon every registrar, explicitly state that "if the persons qualified to give information do not come to him for that purpose, he must (taking with him his register book) go to the house where the birth or death may have occurred, or wherever such person qualified to give information can be found, and ask for it." It is quite conceivable that some registrars are lazy, and to save themselves trouble try to impose it wrongfully upon others. Such cases should be reported to the Registrar-General. But it must be remembered, on the other hand, that the act of registration is not less important to the individual than to the State, and therefore there should be a cordial co-operation between the publi cand the registration officers. — 2. The production of the registrar's certificate of death is not indispensable at the funeral, nor does the officiating minister incur any penalty for burying without such certificate, provided he gives notice (which it is evident he may do by letter) to the registrar within seven days after the burial that no certificate was forthcoming.

A Poor Sufferer should go at once to one of the surgeons of the hospital at which he is studying, and take his advice. Every consideration would be shown to our correspondent.

X. Y. Z.—The address is 15, Bouverie-street, E.C.

THE ETHICS OF CONSULTATIONS.

To the Editor of THE LANCET.

SIR,—Your correspondent on the above matter in your last issue opens up a large subject, which will bear much ventilation, and perhaps be the better for it. He finds fault with a physician for writing a prescription. The laws on this point are very clearly laid down by the College of Physicians, and cannot easily be improved upon. A translation of them used to be published in the Medical Directory. I regret it has been omitted of late years. It is usually a practitioner's own fault if he meet a transgressor of these laws a second time; indeed he is justified in declining to do so.

There are three classes of consultees; and what I say of the medical applies, *mutatis mutandis*, to the surgical.

I. Old women.
II. Humbugs.
III. Scientific, educated men.

I. The "old woman" will be satisfied with a very cursory examination, perpetrate no auscultation, see, hear, smell nothing for himself, accept the diagnosis and treatment of the surgeon, whatever it may be; and if this be all that is desired, there is usually a choice of such consultees at command.

II. The "humbug," full of himself and his own little experiences, sometimes arrogant, often sneaking, parading the latest novelties either actually or in conversation before the patient, and indirectly censuring the surgeon by asking *before the patient* such questions as "how far the uterine sound passes up," when he shrewdly suspects the uterus has never been examined at all. It is, again, the surgeon's fault if he give such a one the opportunity of "charming" any one of his patients a second time. (I use the word "surgeon" merely as the conventional term for ordinary medical attendant.)

III. The "scientific, educated man," and, I may add, gentleman. In a consultation he has three points to consider:—*a*. The benefit of the patient. *b*. The interests of the surgeon who calls him in. *c*. His own interests.

a. Suppose a stethoscopic examination detect mischief when its existence has been specifically denied; suppose albumen be displayed when not expected, or a little extra trouble reveal diabetes; suppose a practised eye detect scabies in a "chronic eczema" that has embittered the life of a child for years; suppose a temperature of 104° be incompatible with a declared diagnosis; suppose an intrusive finger resolve an obstinate "dysentery" into scirrhus of the rectum, or his *tactus eruditus* tell him that catheterism will dispose of a "peritonitis" into the chamber-pot;—the consultee is bound to let the patient have the advice for which he pays his fee, and to use every means of patient personal investigation; as its result, to corroborate, to vary, or to correct a diagnosis, as the case may be. Of course such illustrations could not occur in consultation with your correspondent, but

"Non cuivis homini contingit adire Corinthum."

b. He has to consider how best he may continue and secure the confidence of the patient in his surgeon. Even in such extreme cases as I have mentioned, I have never failed, by a little tact, in carrying out the necessary treatment without the slightest idea on the part of the patient or friends that anything had been overlooked—without arrogating to myself or derogating from another. If a prescription be written down, it is done in private; it is signed by both, and often written by the surgeon; much oftener it is a mere pocket-book memorandum. He must, further, be, under no circumstances, a possible rival in the future possession of the patient; no droppings in to luncheon or to "drum," nor any friendly calls, except at the request of the surgeon.

c. The consultee's duty to himself is, undoubtedly, to live by his profession. If he fulfil the other duties rightly, he cannot fail to secure the good will of the profession and pecuniary recompense; but he has, besides this, to be a continual student, to pass by nothing bearing on the treatment of disease, to have an opinion on ice-bags and condurango. When the use of an instrument—the stethoscope, the urinometer, the thermometer, the speculum—can throw any light on the case, he is bound to use it, and to use it himself, however much the surgeon may dislike it. There are other instruments that may be paraded; but it is the *parade*, not the instrument, that is objectionable.

The duties of the surgeon may be reviewed under the same heads.

a. To the patient. Where the rank or position or wealth of the patient, or the severity or obscurity or long duration of the symptoms, make a case an important one, it is seldom that a consultation is not of some use, if even it be only to say that nothing more can be done. He is but a poor consultee who cannot suggest something.

b. To the consulter (and under this head much might be written). I have said that the consultee should under no possible circumstances be a rival. He should avoid family practice; but if he is to live by his profession thus, the surgeons must, on their part, be liberal in their suggestions of a consultation. If he be neither to attend alone, nor yet be called in by others, he must starve, and the most upright men on this point are often the most neglected. If the surgeon be the one to propose a consultation, he can almost always choose his man; if he leave it till the patient or the friends insist on it, he must probably take the one named to him, and most likely one of Class II., the "popular man," and very likely not a physician at all. There are other ways of negativing a consultation than absolute refusal: the very proposal itself may be couched in such terms as to show it would be unwelcome.

c. His duty to himself—to permit no loss of confidence on the part of his patient. The readiness to suggest a consultation invariably increases this confidence; for it shows that he has confidence in himself. Let him in self-defence always select a man from my Class III.

In conclusion, I may say that in a long experience as consultee I have never known a consultation—where the doctors were both right-minded men—result in anything but good to patient, to physician, or to surgeon. If the two latter observe the royal law binding on them, both as gentlemen and as Christians, and will turn an utterly deaf ear to the tales related by patients, there would be fewer heartburnings and complaints.

As it is my office, and not myself, I seek to magnify, and also for the plain reason that this subject cannot be discussed, except anonymously, without giving pain to individuals—e. g., our friend who came "in a whirlwind of importance," flourishing his thermometer, and who must instantly identify himself,—I beg to subscribe myself merely,

February 19th, 1872. A COUNTRY F.R.C.P.

"Alieni Appetens, sui Profusus."—There can be no doubt as to the validity of the election; and, according to the statement sent us, our correspondent's behaviour has been perfectly honourable and even considerate towards a professional brother. He was reluctant to be put in competition for the office held by a neighbour, refused three times, and only assented on the fourth occasion because it was represented to him that the Club was determined to make a change. We cannot see that he was wrong either in agreeing to be put in nomination or, on election, in agreeing to take the office. We ought to be reluctant to take the place of a professional brother; but it is no part of our duty absolutely to refuse to do so. Clubs and private patients have a right to make changes, and, unless their wish to do so is founded on unreasonable or frivolous grounds, the wish ought to be respected. There is one circumstance which should be noted. The large proportion of the members of the Club did not vote. This is a proof that they were not so dissatisfied with the gentleman holding the appointment as to vote against him. Moreover, 27 as against 32 voted for retaining him. But 32 active opponents are enough to make such a position uncomfortable and undesirable.

MEDICAL BARONETS.

THERE was an omission in the list of Medical Baronets published in our last issue—viz., Sir Joseph De Courcy Laffan, M.D., Physician to the Forces and to H.R.H. the Duke of Kent, a licentiate of the College of Physicians of London, who was created a Baronet by patent dated 15th March, 1828.

To the Editor of THE LANCET.

SIR,—To the list of Medical Baronets given in your last impression, there other names ought to be added to the number of those who received a Baronetcy as a professional reward.

Andrew Balfour, M.D., born 1630, died 1694, youngest son of Michael Balfour, of Denmyline, Bart., was himself created a Baronet by Charles II. Sir And. Balfour was the first President of the Royal College of Physicians of Edinburgh, which institution he, along with Sir Robert Sibbald, planned. He founded the Botanical Garden of Edinburgh, and was the first to introduce the manufacture of paper, and the dissection of the human body into Scotland.—Vide *Memoria Balfouriana, by Sir R. Sibbald.*

Richard Jebb, M.D., born 1729, died 1787, son of Samuel Jebb, M.D. He was Physician to George III., by whom he was created a Baronet. The title became extinct on his death.—Vide *Aiken's G. Biog.; Nichol's Lit. Anec.*

John Elliot, born some time in the first half of the eighteenth century, died 1786. He was Physician to the Prince of Wales, and created a Baronet in 1778 by George III. He died unmarried, and the title became extinct.—Vide *Lempriere's Biog. Dict.; Wraxall's Memoirs of My Own Time*, vol. i., p. 504. Lond., 1815.

Another name ought to be added to the list of those medical men who succeeded to Family Baronetcies.

Alexander Dick, M.D., born 1703, died 1785, fourth son of Sir Wm. Cuninghame, of Caprington, Ayrshire, Baronet, and Janet, daughter and heiress of Sir James Dick, of Prestonfield, Bart. He practised for a time in Pembrokeshire, and in 1746 was elected President of the Royal College of Physicians of Edinburgh. In 1746 he succeeded his brother in the title and estates of his mother's family, when he assumed the name of Dick. He was the intimate friend of Dr. Samuel Johnson, who visited him, with Boswell, in 1773.—Vide a *Memoir of him by Sir R. Keith Dick Cuninghame*; printed for private circulation, 1849.

In connexion with the recent discussion as to the admission of medical men into the Upper House, it may be mentioned that George I. ordered Lord Carteret, Secretary of State, to draw out a patent constituting Sir Thomas Renton, His Majesty's Physician Extraordinary, a Baron of Great Britain, under the title of Lord Renton; but Sir Thomas declined the Peerage.

Yours truly,

February 19th, 1872. M.D. EDIN.

To the Editor of THE LANCET.

SIR,—In the list of medical men published in your last impression who succeeded to family Baronetcies, you omitted the name of Sir Alexander B. C. Dixie, M.D., tenth Baronet, lately deceased.

Yours faithfully,

J. CARTER MURPHY, L.R.C.P. Lond.,
Brompton Barracks, Feb. 21, 1872. Assistant-Surgeon, R.E.

LIFE INSURANCE ACCOUNTS.

THE Bonus Report of the Clerical, Medical, and General Life Assurance Society, as presented at a general meeting of the Society on January 4th, shows a very flourishing state of affairs during the past five years. With an increasing yearly revenue, the mortality of assured lives was much less than had been calculated upon, and the result is that a strict valuation of assets and liabilities has yielded a surplus of £340,278, out of which the Directors propose to distribute £270,000 as dividend and bonus, prudently reserving £35,000 to provide for the probability that the mortality will be above the average in the next quinquennium. The sum to be divided exceeds by £33,000 the amount of any previous division, and will suffice to give £9 a share to the shareholders, and to the assured the largest bonus ever allotted them. The Directors conclude their Report by expressing a hope that the Society's prosperous condition will help to reassure the public mind "that of all monetary institutions none are more secure or more uniformly profitable than Assurance Societies conducted with integrity and prudence." The statement of accounts of the Law Life Assurance Society for the year 1871 has just been issued, showing a dividend to the proprietors at the rate of £4 4s. per share; the "charges of management" include £125 19s. paid in medical fees during the year.

M.D., F.R.C.S., writes under the very natural idea that an injustice was intended. From the result of our inquiries, it would appear that, however the regulations may be worded, the nature of the certificate which had to be signed by the Medical Board was framed in such a way as not to admit of any latitude being given. The result of the second meeting, we are glad to find, proved satisfactory to our correspondent, and an opportunity was, we believe, at the same time afforded to the Board of bringing the matter prominently under the notice of the authorities of the Indian Government with a view to its rectification.

An Occasional Reader surprises us by the question he has asked. We believe the surgery in many of our provincial hospitals to be equal to that of any institution in the world.

M.D., F.R.C.S.E.—The possession of such qualifications gives a claim to the title of "Physician," not to that of "Doctor."

X. Y. Z. has been misinformed.

THE PROPOSED PRIZE WORK ON DOMESTIC MEDICINE FOR INDIA.

To the Editor of THE LANCET.

SIR,—I bring the enclosed to your notice, as there must be a number of medical men in England to whom £100 would be an object. We cannot have too many good competitors in the field.—Yours truly,

G. F. PEARSON, Lieut.-Col.,
Officiating Inspector-General of Forests.

Calcutta, Office of Revenue and Commerce,
24, Chowringhy-road, Jan. 13th, 1872.

Extract from the Proceedings of the Government of India in the Department of Agriculture, Revenue, and Commerce, dated Simla, Oct. 31st, 1871.

"Read—A memorandum, dated the 23rd September, by the Officiating Inspector-General of Forests, asking for permission to print, for circulation to forest officers, a Manual of Directions for the use of common medicines, and the treatment of some of the most common diseases.

"Read also—A memorandum, dated the 2nd October, on the above, by the Secretary in this Department, suggesting the advisability of compiling and printing for general use by officers whose duties compel them to reside very frequently beyond the reach of medical aid—e. g., officers in the Customs, Opium, Forests, Public Works, and other Departments—a simple, brief, and concise Medical Vade Mecum.

"*Observations.*—A simple and concise popular work on medicine suited to the wants of non-professional persons in this country has long been wanted. To the many officers of the Forest, Survey, Customs, Opium, and other Departments, who are scattered over India in situations far removed from medical advice, simple instructions for the treatment of accidents, of diseases, and especially of those tropical diseases which are most common, and which require *early* treatment, would, it is believed, prove of much service, not only for their own use, but also for the use of their families and establishments. Such a work could not take the place of proper medical advice, nor is it proposed that it should be resorted to where such advice can be obtained; but, in the absence of such assistance, much might be done, and probably many lives might be saved, if a manual, well suited to the circumstances, accompanied by a small medicine chest, were placed in the hands of all those who have no other guide. Such a work, however, to be really useful, must be *extremely* simple and concise. It must contain no technical terms, and it should deal with as few remedies as possible. With this object, all the medicines recommended as absolutely essential should first be enumerated, their action explained, and the proper doses, both for adults and children, stated. (Small medicine boxes will be hereafter distributed, arranged expressly with reference to this first chapter.) In the next chapter, the symptoms of the chief diseases, and the treatment which is best suited to each, should be described. A third chapter should be devoted to the diagnosis and cure of accidents; and a fourth should contain general instructions for preserving health, especially in those circumstances of exposure and of residence in unhealthy localities which so frequently attach to the performance of duty.

"*Resolution.*—His Excellency the Viceroy and Governor-General in Council has resolved to offer a prize of 1000 rupees for the best manual of this kind (special regard being had to brevity and simplicity) which shall be submitted on or before the 15th October, 1872. Manuscripts should be sent to the Inspector-General of Hospitals, Indian Medical Department, Calcutta, superscribed 'Manual of Family Medicine for India.' A sealed envelope should accompany each, the outside bearing a motto, and containing within the name of the author. The work will be the property of the Government, and will be published with any additions* or omissions that Government may deem necessary at the public expense, bearing the author's name."

* These will be printed in brackets.

PERILS OF THE SEA.

As a means of saving life from shipwreck, and as the complement of the life-boat, the apparatus devised by Mr. Rogers demands a word of notice from us. The apparatus consists of two projectiles—a cone destined to be thrown from the shore over the ship in distress, and an anchor to be thrown from the ship to the shore. Each projectile is intended to be fired from a mortar, and each carries a double whipline running through a block, by means of which a rope may be at once run out and made fast as soon as the anchor has buried its flukes in the ground, or as soon as the cone has been secured on board the endangered vessel. Several experiments made within the last few days with the apparatus have proved highly satisfactory, as affirmed by a resolution agreed to by a large number of officers of the Royal Navy and of the Naval Reserve who witnessed the trials. Perhaps the gratification awakened by the contemplation of the strenuous efforts made in the present day to preserve human life from the raging flames or the devouring flood may be regarded as a kind of set-off against the depression one feels in view of the comparative indifference manifested in respect of sanitary requirements.

Mr. Pembroke Minns.—Full information may be obtained of Gilbert Drenchley and Co., 27, Wharf-road, City-road.

EDINBURGH UNIVERSITY.

To the Editor of THE LANCET.

SIR,—In your annotation last week on the "Edinburgh University," the writer has evidently no personal knowledge of his subject—at least in one respect. No one would desire to uphold the proceedings of the students on the occasion of the rectorial address, and least of all a former student of the University; but the explanation offered is certainly not the truth. The writer says: "The truth is, a class of young men, inferior socially to their predecessors of ten years ago, now resort to the Edinburgh school, which has lost much of its attractiveness now that London and other seats of learning are so well appointed and so efficiently worked." I have no objection to the latter part of this statement; but the former is at variance with facts. Being an old student and graduate of Edinburgh University, I have recently visited the city on two occasions, when I have attended the lectures of Professors Christison, Bennett, and Spence; accompanied Professor Lister and Dr. Grainger Stewart round the wards of the infirmary, and visited the dissecting-rooms. I noticed no signs of deterioration amongst the students since I was one myself twenty years ago, either in their personal appearance, behaviour in class or elsewhere; but I found the same earnestness and diligence which have always characterised the students of this famous seat of learning. Sir Robert Christison told me that he wondered to see this session such a great increase of students, equal to the whole of a moderately-sized London school, especially when it was considered that several eminent professors have recently died. Professor Turner has even a larger class of Anatomy than the late Professor Goodsir, so that his lecture room will scarcely accommodate the students. He has, I believe, the largest class which has ever been known in the British Islands, scarcely excepting that of Robert Knox in his palmy days, when he was the king of British anatomists. The same is the case with other professors, as I found from personal observation. The increase has taken place simultaneously with a decrease in most of the provincial schools, whilst some of the London ones have not added largely to their numbers; and this increase is from all parts of the world, showing no diminution of attractiveness in the advantages conferred by the University. The real explanation of the unseemly conduct of the students is the fact that there is a strong feeling on the question of lady students; and one professor told me that it was carried to such an extent that private friendships were divided amongst professional men, whilst the students were generally opposed to the movement. Much bitterness has arisen from this cause, and it was called forth on the occasion of the rectorial address in a manner which is much to be deprecated.

Your obedient servant,
Darlington, Feb. 19th, 1872. J. W. EASTWOOD, M.D. Edin., &c.

To the Editor of THE LANCET.

SIR,—In your number for the 10th instant I see an annotation on the election of Lord Rector to Edinburgh University, from a casual perusal of which a reader would deduce that the medical students were the sole cause of the disturbance. This I beg to protest against, and for the two following reasons:—That the part of the Rector's address which you state to have alone been audible—i. e., referring to the medical education of women—was neither more nor less audible than the other parts of his speech. I was present, and, being a medical student, was very desirous of hearing what Sir William's opinions were (as all other medicals would be), but was quite unable from the noise to judge of the views he took. Again in the procession I noticed that a great many of the students there present were Arts or belonging to the other classes. I should say one-half belonged to the other faculties. However, by no means understand that I uphold the disturbance which some of the students caused, but, on the other hand, deeply deplore it, and tried to dissuade several medical students whom I knew from joining in the procession.

Yours, &c.,
Edinburgh, February, 1872. J. H. B.

L.R.C.S.I.—There are many respectable foreign degrees which it is right to use, even though they cannot be registered. But the best thing the owner of the LL.D. of Philadelphia can do with that title is to make a profound secret of it. For a medical man to style himself "Dr." on the strength of such a degree is undoubtedly very objectionable; and if a gentleman possessed of only a surgical British qualification uses this title, he violates the Medical Act.

Verax.—We do not agree with our correspondent. It is no part of our duty, after recording that a medical man received a testimonial in 1873, to rake up faults committed by him in 1871. This would be more like malice than justice.

EXTRAORDINARY CASE OF FEIGNED DISEASE.

WE have received several communications in reference to this subject and the principal actor in it, for which we are much obliged.

THE RADCLIFFE INFIRMARY.

WE have received some further complaints relative to the exclusion of the profession from the surgical practice of the Radcliffe Infirmary. Our views on the general question have been pretty clearly and recently expressed, and we hope that the authorities of the hospital will be stimulated to make such concessions as will be reasonable in themselves and satisfactory to the profession in Oxford. It is a pity that there should be any ill-feeling excited in the matter.

Mr. Brooks, (Silverdale.)—If our correspondent will have the goodness to forward a short report of the case, it shall have our consideration; but it is beyond our power to promise as to the date of its appearance.

An Objector to Sixpenny Fees seems to have misapprehended the nature of the officer wanted. It is not public vaccinators, but vaccination officers, for whom the Nottingham Guardians advertise. Of course they do not expect applications from "duly qualified medical men."

M.R.C.S. had better consult a solicitor.

MIDWIFERY FEES.

To the Editor of THE LANCET.

SIR,—A woman engaged me to attend her in confinement two months in advance. A week or two before her confinement I saw her and her husband, and they requested to be released from the engagement, stating that she was going to a distance to her mother to be confined. I released her on this understanding. She did not go away, but was confined by a midwife in due time at home, and the previous tale was simply an invention to elude the engagement and save the fee. Now, I think I am entitled to my fee, and have applied to the husband for it. He, however, sets me at defiance. Can any of your numerous readers refer me to a similar case which has been tried, and with what result, and under what judge?—Yours, &c.,

February 17th, 1872. INQUIRENS.

A Sceptic.—We agree with our correspondent in doubting whether Mr. Bruce's proposed measure will prove effective in putting a stop to solicitations in the public streets, for the simple reason that few persons would like to give an unfortunate woman into custody with a view of subjecting her to an imprisonment of from three to twelve months. Such a punishment will, we suspect, defeat its object.

Quærens.—The work mentioned will, no doubt, meet the requirements of our correspondent.

Anon must take the opinion of his usual medical attendant, or of some medical friend, on the subject.

ERRATUM.—In the review of Aitken's Science and Practice of Medicine at page 224, 24th line from top, read "tubercular *pericarditis*" for "peritonitis."

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Pavy; Mr. Teevan; Dr. H. Bence Jones; Dr. Ogle; Dr. Balfour, Edinburgh; Dr. Roth; Dr. Morson, West Maitland, N.S.W.; Dr. Oakman; Dr. Gibb, Rathdrum; Mr. Ravenhill, Wolverhampton; Dr. Robertson, Birkenhead; Mr. Bigden; Dr. Percy Leslie; Dr. F. J. Brown, Rochester; Dr. Aveling; Dr. Maxwell, Stickney; Mr. Holman; Mr. Corfe; Mr. Barter; Mr. Wilson, Chatteris; Mr. M'Kellar, Stockwell; Mr. Chater, Eastbourne; Mr. Green; Mr. Bowkett; Dr. Eastwood, Darlington; Mr. T. Russell, Guildford; Dr. Ross, Brighton; Mr. Colville; Dr. Evans, Birmingham; Mr. Powell, Bromyard; Mr. Stedman; Mr. Grady, Galway; Dr. Chittenden, Netley; Dr. Husband, York; Mr. A. Humfrey, Templemore; Mr. Jacobi, Funchal; Mr. Walsh; Mr. Segrave; Mr. Macrae; Dr. Lawford, Leighton Buzzard; Dr. Prior, Bedford; Mr. Mapleson, Gloucester; Mr. Crooke, Melbourne; Mr. Wood, Burnley; Mr. Bartlett; Mr. Phillips; Dr. Wilbrand, Giessen; Dr. Waters, Liverpool; Mr. Morton, Guildford; Mr. P. Swales, Sheerness; Mr. Warner, Cirencester; Dr. Morgan, Carnarvon; Dr. Miller, Dundee; Dr. Gopaul Chunder Roy; Dr. R. J. Lee; Dr. Mackintosh, Callington; Mr. Hargreaves, Leeds; Mr. Rowland, Amersham; Mr. Caton; Mr. Reed, Exminster; Mr. Lang; Mr. Wharton, Sterry; Mr. J. Gover, Bridgwater; Mr. G. M. Stansfeld; Mr. Lawton; Dr. Hawkes, Hanwell; Dr. Murphy, Chatham; Mr. Walter; Mr. B. Nason, Leeds; Mr. Pratt, Kidderminster; Rev. E. Bartrum, Berkhampstead; Dr. Hardman, Blackpool; Dr. Cole, Hebburn; Mr. Philipson, Wellingborough; Mr. E. Nugent, Drogheda; Dr. Molini, Piacenza; Mr. Smyth, Hulme; Dr. A. Davidson, Liverpool; Mr. E. Roper, Morristown; Dr. Port, Dalston; Dr. Magill, Chathill; Mr. Brooks, Silverdale; Mr. Walker; Mr. Wallis, Cambridge; Dr. Torrop, Heywood; Mr. Maugham; Mr. Poole; Dr. Eben. Watson; Mr. Harrison; Dr. Fairbank, Windsor; Mr. G. Chester, Membro'; Mr. Lea, Watford; Mr. Masterman, Burnham; Dr. St. Clair; Mr. Jones, Leith; Mr. Roberts, Yokohama; Mr. Halton, Chester; Mr. R. Whitwell, Salford; Mr. Ewens, Crickhowell; Mr. Davies, Chichester; Mr. Horne, Burton; Dr. Nattrass; Mr. Mackay; Glaucus; ——, Melbourne; M.D., F.R.C.S.E.; Inquirens; An Objector to Sixpenny Fees; Corpus Sanum; J. H. B.; A Surgeon's Son; M.D., M.R.C.S.; C. F.; M.D. Edin.; Caustic; A Poor Sufferer; Medicus; Senior Student; Indophilos; New Zealand; Lex; A Sceptic; Quærens; A Subscriber; M.R.C.S.; &c. &c.

Staffordshire Advertiser, Barnsley Times, Metropolitan, Essex Herald, Money, Central Somerset Gazette, Journal of the Gynæcological Society, Index to Prices, Irish Times, Leicester Journal, Cork Examiner, Leeds Mercury, Melbourne Argus, Liverpool Daily Courier, Kilburn Times, Bradford Daily Telegraph, Australian Medical Gazette, Newcastle Daily Chronicle, United Service Gazette, and *Temperance Record* have been received.

Medical Diary of the Week.

Monday, Feb. 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Flower, "On the Comparative Anatomy of the Organs of Digestion in the Vertebrata."
MEDICAL SOCIETY OF LONDON.—8 P.M. Mr. Victor de Mérie: "Casts and Drawings in a Case of Congenitally Deformed Hands and Feet."—Mr. Walter Coulson, "On Lithotomy after Lithotrity."

Tuesday, Feb. 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION. — 3 P.M. Dr. W. Rutherford, "On the Circulatory and Nervous Systems."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY. — Thanksgiving Day. The Library will be closed, and the ordinary evening meeting will not be held.

Wednesday, Feb. 28.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Flower, "On the Comparative Anatomy of the Organs of Digestion in the Vertebrata."
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Dr. Hensley, "On the Mechanism of Respiration, Circulation, and Digestion."

Thursday, Feb. 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Odling, "On the Chemistry of Alkalies and Alkali Manufacture."

Friday, March 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Flower, "On the Comparative Anatomy of the Organs of Digestion in the Vertebrata."
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Dr. Hensley, "On the Mechanism of Respiration, Circulation, and Digestion."
ROYAL INSTITUTION.—9 P.M. Mr. C. W. Siemens: "Measuring Temperatures by Electricity."

Saturday, March 2.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. Moncure Conway, "On Demonology."

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